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## J O U R N A L

## OF THE <br> ROYAL ASIATIC SOCIETY

OF
GREAT BRITAIN AND IRELAND.


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## JOURNAL

## OF THE

## ROYAL ASIATIC SOCIETY.

Art. I.-Hindí Inscriptions, by Walter Elliot, Esq., Madras Civil Service.—Read l6th July, 1836.

I beg to present to the Society two MS. volumes, containing copies of 595 Inscriptions, collected, during a period of eight years, in the southern Mahratta country, or the district of Dharwar; in the western part of the Nizam's territorics; in the northern district of Mysore ; and from the province of Sunda, comprised in the Mangalore collectorate.

Most of these are engraved on great slabs of stone, generally formed from a compact black basalt, which takes a fine polish, and seems particularly adapted for resisting the influence of the weather. Sometimes the slabs are of clay slate, or (particularly to the N. E.) of a small schistose limestone, more liable to injury and erosion. Others, again, are cut on the pillars of temples, or on their exterior walls, as on the sandstone temples of Ellora; and a very few are taken from deeds engraved on sheets of copper, that had been long in the earth, and had accidentally been brought to light. Several have been procured from monumental stones recording the death of warriors, or the incremation of sattís; the latter are frequent in the S. W. portion of the Dharwar district, and in Mysore, and display rudely-sculptured representations of the scenes recorded. The plain slabs have generally a few symbols engraved above the commencement of the inscription. In the right corner is the sun, in the left the moon. Below the sun is sometimes found the peculiar ensign or symbol of the party making the grant. Thus, the Chalukyas carry the figure of a boar, which was their signet, or ensign; and the Yadavas are often distinguished by the representation of a crooked knife, or dagger. Underneath the moon is a cow and calf, which were always presented to the Bráhmans on the occasion of grants being made. In the centre is the chief object of worship of the granter. The Chalukyas, being followers of Siva, have the Lingam in this situation, with an officiating priest on the one side of it, and a votary on the other ; the Kalabhuryas, a sitting Jain Tirthara, with attendants, \&c.

But most of the grants having been made by individuals of humbler rank, they represent some symbol peculiar to them, together with the Ling, or a Jain dcity. A grant by a zemindar of the Nagavansa at Bheiranmati, near Bagalkotah, in Saka ${ }^{1} 912$, exhibits, under a representation of the sun, a cobra di capello snake, with the hood expanded, a Lingam in the centre, and the cow and calf under that of the moon.

The language employed is for the most part Sanskrit, arranged in slokas of different metres, and containing a considerable mixture of ancient Kanarese words and phrases, many of them now obsolete. Somctimes the Kanarese tongue predominates much more, and a few are entirely in that dialect. The monumental stoncs are invariably Kanarese.

It was not until I becamc possessed of a great number of these inscriptions, and endeavoured to arrange them chronclogically, that I derived any useful results from them. I then perceived that they contained historical facts of considerable importance, together with notices of ancient manners and customs, particularly regarding rights of property and tenures of land, of a very interesting nature. The present paper is confincd to a notice of the historical data, as far as they have been made out.

The first object was to make a catalogue raisonné of the whole collection, a copy of the most useful portion of which is transmitted, serving as an index, or table of contents to the volumes themselves. But in accomplishing this, several difficultics presented themselves. The inscriptions all commemorate grants of land, moncy, or the transfer of seignorial rights to temples, gurus, ${ }^{2}$ or religious establishments, or for the preservation of tanks, and public works. Sume of thesc arc dated from the Saka year in which they were made, but a great number record only the Samratsara, or year of the cycle (the Vrihas patí yuga,) of sixty years, which, in a period extending over some centuries, indicates no definite cpoch. Others, again, merely state the ycar of the king's reign, or that of some petty æra introduced by a sovereign of the time, ambitious of perpetuating his name by founding a new Saka of his own.

By comparing the wholc of thesc together, however, and making use of such as had the Samvatsara and the Saka ycars botin mentioned, all the other cycle years in the scries bcforc and after the ones specified were arranged in their proper places. The results were so satisfactory, and tallied so well with each other, as to establish

[^0]the conviction that the arrangement now offered must be very nearly correct. By the same means, also, certain names of different princes were identified with particular titles adopted by them. In some inscriptions they are designated by one title, and in others by a different one, having all reference to the same, though at first appearing to point out different individuals.

Some difficulty was likewise experienced in the obsolete characters employed in the earlier inscriptions. An alphabet of such of these forms as were deciphered, was prepared by the Kanarese copyists in my service, which was printed at the Bombay lithographic press, for general distribution. A few copies accompany this paper.

The inscriptions so arranged are found to relate to four dynasties of princes, reigning over the greater portion of that part of India now denominated the Dakshana, or Dekkan, but at that time Kuntala désa. The capital was first Kalyán (in the Muhammadan province of Kalbarga), and subsequently Dévagiri, now the modern city of Dowlatabad. The limits of this kingdom appear to have been the Nermada, or Nerbudda, on the N. ; the Ocean on the W. ; the line formed by the Kanarese language on the S. E., which includes part of the Bellary collectorate; and on the S. W. they would include the provinces of Nuggar, or Bidnúr, and of Sunda. The best defined natural line is, the course of the Krishna, and Tungabhadra ; but many inscriptions, particularly of the Dévagiri princes, have been obtained considerably to the south of the latter river. The eastern boundary I have not been able to ascertain, but it is probable that it did not extend beyond the Gháts, under which lay the kingdoms of Kalinga and Andhra, which are bô̂h mentioned as occasionally hostile to Kalyán. I have procured records throughout a considerable portion of the limits above stated, as far as the Godavery N., and Kalyán E., and from the frequent contests mentioned in them with the princes of Gurjara, Malwa, Kalinga, Chola, \&c., I conceive them to be pretty correct.

The term Karnataka désa, is likewise used to designate this tract in the later inscriptions. The Karnataka province would seem to be more naturally marked out by the range of the Karnataka language, which would both fall short of the extent of the Chalukya sway on the N., and likewise carry it too far to the S. ; to places where there is no record of their authority having ever reached. The boundary of the Kanarese tongue on the W. and N. may be designated by a line drawn from Sadasoghur, on the Malabar coast, to the westward of Dharwar, Belgaum, and Húkairi, through Kagal and Kurandwar, passing between Keligaon and Pandegaon, through Brahmapuri, on the Bhima, and Sholapur, and thence east, to the neighbourhood of

Beder. From Sadasoghur, following the southern boundary of Sunda to the top of the western Ghats, it eomprehends the whole of Mysore as Koimbatúr, and the line of eastern Gháts,--including much of the Chola and Belála kingdoms, and even Dwara Samudra, the eapital of the latter, which was never subjugated by the Chalukyas. On the other hand, distinet evidence exists of their having possessed nearly the whole of Maharashtra. The Mahá Mandaléswar, or hercditary chief of Kolapúr, was one of their chief feudatories, and Vikram Chalukya II. is recorded to have married the daughter of the Mandaléswar, or Zemindar of Mangalakola, besides other notices of the Nermada, as being their northern limit.

The period more immediately embraced by these dynasties is from Saka 895 (in which the principal one, that of the Chalukyas, recovered its power, which had been subverted some time before,) to Saka 1234, when the Yadavas of Dévagiri were overthrown by the Muhammadans. But proofs have likewise been obtained of the possession of sovereign authority by the Chalukyas at a much earlier epoch, commencing about the fifth century of the Salivahána æra.

The following is a tabular statement of the prinees that reigned during the best authenticated period:

| I. Chalukya Dynasty. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NAME. | Title. | $\begin{gathered} \text { Began } \\ \text { to } \\ \text { Reign. } \\ \text { Saka. } \end{gathered}$ | $\begin{gathered} \text { Ceased } \\ \text { Reign. } \\ \text { Reign. } \\ \text { Saka. } \end{gathered}$ |  |  |  |
| 1. Teilapa Déva.... <br> 2. Satya Sri, or Irivi Bhujanga Déva... <br> 3. Vikramáditya I., or Vibhu Vikram <br> 4. Jaya Sina Déva <br> 5. Soméswara Déva <br> I. <br> 6. Soméswara Déva II., Soyi Déva, or Sovi Déva......... <br> 7. Vikramáditya II., or Kali Vikram, or Permadi Raya <br> 8. Soméswara Déva III. $\qquad$ <br> 9. $\qquad$ <br> 10. Teilapa Déva II., or Nurmadi Teilap. $\qquad$ <br> 11. Soméswara Déva IV. $\qquad$ | Jagadeka Mala ... Treilokya Malla Ahawa Malla... <br> Bhuneka Malla ... <br> Tribhuvana Malla <br> Bhuloka Malla ... Jagadeka Malla... <br> Treilokya Malla... <br> Tribhuvana Malla | $\begin{gathered} 895 \\ 919 \\ 930 ? \\ 940 ? \\ 962 ? \\ 991 ? \\ 998 \\ 1049 \\ 1060 \\ 1072 \\ 1104 \end{gathered}$ | 919 $930 ?$ $940 ?$ $962 ?$ $991 ?$ 998 1049 1060 1072 1104 1111 | 24 $11 ?$ 10 $22 ?$ $29 ?$ $7 ?$ 71 51 11 12 32 7 | $19{ }^{\frac{1}{1} 1}$ |  |



## OF THE CHALUKYAS.

This is the oldest race of which we find satisfactory mention made in the records of the Dekkan. They seem to have belonged to the great tribe that, under the general name of Rajpúts, exercised dominion over the whole of Northern and Central India. It seems doubtful whether the name Chalukya occurs in the catalogue of the thirty-six royal races, but Colonel Tod has identified them with the Solaukis, who are included in that enumeration, and who for a long time ruled over Anhalwara Pattan, in Gujarát. The Solaukis, however, were one of the four Agnikulas, whereas the Chalukyas always profess themselves of lunar origin. And it is remarkable, that in none of the inscriptions quoted by Colonel Tod, do they
style themselves Solaukis, but always Chalukyas. ${ }^{1}$ Nor does the former title ever occur in any of the present inscriptions. Indeed, there is crery reason fer believing, that the two powerful dynasties of Gujarát and the Dekkan had a common origin. ${ }^{2}$

The accompanying trce shows the genealogy of the Chalukya family for twenty-four generations, and extends over a period reaching from the fifth to the thirteenth century of the Salivahana æra. Nearly the whole of the present collection of inscriptions, however, are subsequent to the restoration of the family, in the person of Teila, in Saka 895. The names anterior to that prince are given on the faith of two inscriptions, ${ }^{3}$ which profess to be taken from older inscriptions, on copper plates then extant. Such evidence, from the universal anxiety of all men to exalt the source from which they derive their origin, would have been insufficient to admit their claim to regal power antecedent to the dates shown in the great body of inscriptions; but, fortunately, some of these copper deeds have themselves come to light. One of them, found at Kurt-Kotah, in the Dambal Parganah, ${ }^{4}$ I have now the honour of presenting to the Society. It consists of two plates of copper, united by a ring, on which is engraved the figure of a boar, ${ }^{5}$ the distinctive symbol or seal of the Chalukyas. These plates are inscribed on both sides with characters of the Hala-Kanarese alphabet, and refer to a grant made by Vikramaditya, the eighth from Jaya Sinha, in Saka 530. Two others were given to Captain T. B. Jervis, Bombay Engineers (who kindly allowed me to copy them), by Chintaman Row Patwardhan, the Chief of Sangli, in whose Jagír they were found; and three more, on stone, were met with in an old Jain temple, at Lakmeswar, all belonging to the earlier dynasty ; together with a renewal of an older grant, existing at Aminbhavi, near Dharwar.

From these authoritics we learn the following facts: Jaya Sinha claims to be descended from ancestors previously enjoying royal power, ${ }^{6}$ of whom fifty-nine reigned in Ayodyapura and other places,
${ }^{1}$ Ann. of Rajn. vol. i., Appendix IV. and VI. pp. 801-4. ${ }^{2}$ Ibid, i. p. 97.
${ }^{3}$ 1. At Ye-ur, in the Nizam's territory, No. 4 of Vikram II., p. 166 of MS. 2. At Handarki, in Tondur, Nizam's territory, No. 141 of Vikram II., p. 402 of MS.

4t was dug up in repairing the house of the Kulkurni, or village aecountant, in 1827.
${ }^{5}$ This device was sulsequently adopted by the Kings of Vijayanagar. Lands are still, on similar metallic deeds, granted by them, and bearing the same effigy on the seal.
${ }^{6}$ Ye-ur, App. No. I. The Jain Guru of the Malkheir Simhasanam gave the following traditionary account of the ancestors of Jaya Sinha,-that they were

GENEALOGY OF THE CHALUKYA RACE OF KALYÁN.


Satya Sri, from whom the family take
the title of Satya Sri Kula, was
reigning in 488 Saka
Amara
Aditya Varma
Vikramáditya-began to reign Saka 514
2. Mangalisa

Vijitáditya, married Bouta Dévi, daughter of Latchman, Raja of the Bhedivansa Teila Bhuspam Vikramáditya, married Jakabya

I

1. Satya Sri, married Ambika Dévi
2. Dasa Varma, married Blagavati Dévi !
3. Vikramáditya I.
!
4. Soméswara Déva II., Blıunek Malla
 Malla, Ahawa Malla 1
5. Vikramáditya II., Kali Vikram, or Vir Permadi Raya
Soméswara Déva III., Bhulok Malla

6. Teilapa II., or Nurmadi Teila, Treilokya Malla
in the north, or in Hindústan; and among these are specified the names of Vishnu Verddhana, Vijayáditya, and Satya Sri. Sixteen are then described as reigning after him, in the Dekkan, or South country; but previous to them, two other families or races had possessed it, the Kartas ${ }^{1}$ and the Rattas, the latter of whom were overthrown by Jaya Sinha, who defeated and destroyed Krishna, the Ratta Rajáa. ${ }^{\text { }}$

His son was Rájá Sinha, surnamed, from his warlike qualities, Rana Ragaha. The name, Rájá Sinha, oceurs only in one place, ${ }^{3}$ and may, perhaps, not be correct; but his title appears repeatedly.

The son of the preceding, Pulakesi, appears to have been a prince of great power. One of the copper deeds, in the possession of Captain Jervis, records a grant made during his reign, in Saka 411. He is deseribed as "having performed the Aswamedha sacrifice; as plunging among the hosts of his enemies, mounted on his horse Chitra Kanta; as reigning from the Ganga to Sctu; his standard floating to the Ganga and the Yamuna, Lord of the Single Canopy (eka chatra adipati), and imposing his orders on the mighty ehiefs of Chol, Kerala, Kalinga, Simhala, Bhupal." ${ }^{*}$
descendants of the Kings of Dehli, from whom sprang Hema Syn, who came to Darmapur, forty kos from Hyderabad, and married the daughter of the chief of that place. His son, Dharma Pal, marricd the daughter of the Rajah of Chikodi (near Kolapur), and built the fort of Bagalisotal, (on the Ghatpa or Glatparba river,) whence he derived the title of Bagarasu. He afterwards settled at Sivagam, near Aurungabad, and made himself master of Sarrar-shapúr, beyond the Godaveri; and finally he bnilt, and settled himself at Nagavi, near Malkheir. His son, Chittra Datta, or Chitr Syn, removed to Chitapur, three kos from Nagavi, on account of the badness of the water, and built Malkheir, or Mahipati Nagara; the old name of which was Maliyadra. Subsequently they removed to Kalyán, changing its name from Belgola, to its present denomination. But this account is too vague to be deserving of much credit.

In one of the inscriptions the origin of the family is deduced from " Brahm, Manusputra (or Atri), Mandavi or Mandarvya, Hăriti, Hāriti Pancha Sikha, who was making a libation to the sun, at the Sri Sauddhya, when the Clalukyas sprang from the spray of the water poured out. In this race were born Vishnu Verddhana, Vijayaditya, and Satya Sri, Lord of Ayodya, \&c."-IIandarki Ins., p. 40\%.

In another, the descent is brought from Brahna, through Budha and Ila, to Paruravas, "from whom came Hariti the fire-tufted, making illustrious the Somavansa, and progenitor of many royal races, conspicuous among which was the Chalukya vansa, in which was born Satya Sri, the lord of Ayodya, from whom the race was denominated the Satya Sri Kula."—Ins. at Ittagi, No. 86 of Vik. II., p. 319.
${ }^{1}$ Ins. at Handarki, p. $402 .{ }^{2}$ Ins. at Ye-ur, App. No. I.
${ }^{3}$ Captain Jervis's copper Sasana,
4 Copper Sasana. The grant is made by Sivunda of the Nilasandra Vansa, servant of Satya Sri Pulakesi, who appointed him governor of the Kukundi dés

The Ye-ur inscription styles him lord of Watapipura; and another, at Barungi, in Mysore, relates that, " among many former celebrated Rajas, was Pulakesi. He burned Kanchi, the capital of Chol, who in return destroyed Kalyan, which Pulakesi no sooner heard, than, mounting his elephant, he attacked Chol and killed him." ${ }^{1}$

The brothers Kirtthivarma and Mangalisa, severally followed their father Pulakesi; and the succession was then continued in the elder branch, by Satya Sri, son of Kirtthivarma. He is said to have been celebrated for his virtuous qualities (Satya), and it is added, that from him his descendants adopted the title of Satya Sri Kula. But we find the same title adopted as a generic appellation by his grandfather, Pulakesi, and it is likewise enumerated among the names of those princes who had previously reigned in the North. ${ }^{2}$ We also find it assumed by many of his successors, while others prefer that of Vikramaditya, or Vikram.

His æra is fixed by an inscription at the small village of Amnibhavi, four or five miles from Dharwar, which shows that he was reigning in Saka $488 .{ }^{3}$

The next names on the list are Amara, Aditya Varma, and Vikramaditya. The copper grant now on the table is of the time of the last-mentioned prince. It bears date, the thirty-second of his reign, Saka 530, and his accession is thus fixed as having occurred in
of 700 villages, in one of which, Alakta rájáraya, producing rice, sugar, cloves, nutmegs, he built a Jain mandapa, by permission of the Satya Sri, and endowed it, \&c. The date is expressed thus: "Sak' abdéshu ékadasutréshu chatu sétéshu vibhuva Samvatsara." This gives Saka 411, but Vibhuva is 410 ; a difference of one year, however, between the inscribed date, and that calculated from the present time, occurs in several other places.
${ }^{1}$ Ins. No. 103 of No. VII., p. 352 of MS. I am not acquainted with the site of Watapipura. Many of the great families are styled lords of some great city, as the Kalabhuryas of Kalanjra, and the Silaharas of Tagara, which have no reference to their existing localities.
${ }^{2}$ See App. No. I.
${ }^{3}$ It resords the renewal, in the time of Tribhuvana Malla Vikram (one of the later Chalukya princes, subsequent to Teila), to the Sri Mulasthan Kali Deva temple, by Ananta Palarasu Danda Nayaka; which grant had formerly been made by, or in the time of Satya Sri, son of Kirtthivarma, son of Pulakesi, then reigning or residing at Kesuwalala, on the banks of the Malapahari river, in Saka 488, Servajit Samvatsara. The date is given distinctly in figures, and, as in the former instance, the cycle year corresponds within one of the calculation made from the present time, Servajit thereby being 489. The renewal of the grant is made by Ananta Pal, chief of the Palsagi 12,000 (villages understood). The different jurisdictions or territorial divisions, arc always expressed in this manner. Palsagi is the modern Parganah of Halsi, in the Bidi Talúk.
515. ${ }^{1}$ In another place he is called "the disturber of the Rajabs of Pandya, Chola, and Kerala, and of the Kadamba Kula," and is described as making the Kanchipati (or lord of Kanchi, the capital of the Cholas), kiss his lotos feet. ${ }^{2}$

Yudha Malla, a title equivalent to that used by some of the later princes, of Ahawa Malla, succecded his father Vikram. His name occurs in one of the Lakmeswara inscriptions, and appears to have been Vinayáditya Satya Sri, "who churned the Lords of Kanchi, and of Singala Dwipa, as the son of Siva destroyed Taraka. ${ }^{13}$

The æra of his son Vijayáditya is fixed by the inscription just quoted, which is dated Saka 651, in the thirty-fourth of his reign, thus determining the year of his accession to be Saka 618.4

A second inscription in the same Jain temple was made in the time of the son and successor of Vijayáditya, namcd Vikramáditya. In it Saka 656 is stated to be the second of his reign; thus giving Saka 655 as the year of his accession, and ascertaining the duration of his father's reign to have been thirty-eight years. ${ }^{5}$

No records have been obtained of any of the succeeding names in the list, till the time of Teila. It appears indeed, that previous to the æra of that prince the power of the Chalukyas was alienated for a time, or had suffered a partial obscuration; for he is described as having recovered his hereditary dominions, by again subduing

[^1]the Rattas, who seem not to have been entirely extirpated by Jaya Sinha, but to have grown again into power, or to have obtained a temporary advantage over their conquerors.

A fact mentioned by Colonel Tod, affords some confirmation of this supposition. "It was," he says, "in Samwat 987 (corresponding with A.d. 931, and with the Salu Saka 853), that Bhoj Raja, the last of the Chawaras, and the Salic law of India, were both set aside to make way for the young Moolraj, who ruled Anhalwara for the space of fifty-eight years. He was son of Jeysing Solauki, the emigrant prince of Calian, who married the daughter of Bhaj Raj." ${ }^{1}$

Allowing a period of twenty or thirty years to have elapsed previous to the accession of Moolraj, the revolution which drove the Chalukyas from the throne may be placed in the third or fourth generation previous to Teila, or about Saka 820. Though the name Jaya Sinha does not occur in the genealogical catalogue, he may have been one of the royal family, who sought the then famous court of Anhalwara, to repair his fortunes; or, as many of those in the list have two or more names, and titles besides, he may have likewise been known by some other appellation.

The fact, however, seems indubitable, that the Rattas gained the ascendency for a time, till they were again finally reduced to subjection by Tcilapa.

On a review of the preceding statement, though the different data appear to confirm each other in so many instances, we cannot but remark that the period of time supposed to be occupied by the decendants of Jaya Sinha much exceeds that which probability warrants. The first date that has been obtained, is that of Pulakesi, which appears to be Saka 411. From that year to the accession of Teila, in 895, a period of 484 years is embraced, in which are found fifteen names; thus giving an average of fifteen and a half years to each reign,-a duration evidently greatly beyond probability. From Pulakesi to Vikramáditya, in Saka 655, are nine names, and 244 years, affording an average of twenty-seven years to a reign; and the same result, nearly, is obtained by extending the calculation to the final extinction of the family, in 1111, a period of 700 years, containing twenty-seven names, with an average of twenty-six years and a third to each reign; none of which are warranted by analogy. A reference to the Table of Dynasties at p. 4, shows that the later Chalukyas, including one reign of fifty-one years, averaged only

[^2]nineteen and a fraction years each; and the Yedavas, a fraction less than eighteen. Assuming this average as a basis, we cannot assign to Jaya Sinha an earlier date than Saka 572 ; nor to Pulakesi, one beyond Saka 610.

The only solution of the difficulty that offcrs is, to suppose that the æra of Pulakesi has not been rightly ascertained. But then the mistake must bc continued through the whole of the succeeding dates, which tally with each other in a way that affords the strongest presumption of their freedom from any matcrial crror. The complete genealogy only occurs on a stone at Ye-ur, purporting to have been eopied from an older eopper Sasana. It states, however, (and it is confirmed by another stone at Handarki,) that " sixteen reigned after Jaya Sinha," and accordingly we find that number occurring from Rana Ragaha to Teila, who began a new epoch. A slight doubt, however, occurs in two places: 1st. Whether Mangalisa, second son of Pulakesi, actually did reign; and, 2dly, Whether Vikramáditya, who began to reign Saka 655, was sueceeded by his son Kirtthivarma, or by his nephew of the same name, or by both consecutively. Admitting both these events, and the first seems hardly doubtful, we have seventeen names after Jaya Sinha, and sixteen between the ascertained dates, which, however, only reduces the average of each reign to thirty years. Another supposition is, that the expression "sixteen reigned in the Dekkan" refers only to those who actually enjoyed regal power, and excludes some of the immediate predecessors of Teila; but, on the other hand, the genealogical succession is full and complete, and deduced regularly to Teilapa.

A more authentic æra now commences. Teila having conquered the Rattas, began to reign Saka 895." He is described as "a new shoot of the royal tree of Chalukya, securing his hereditary dominions from the grasp of the enemy, as Vishnu in the Varaha Avatar saved the earth from Narkasura;" as "overthrowing the Rattakula, and slaying the brave Munja;"3 as "destroying Kankara, the moon of the Ratta Kula Sea;" ${ }^{4}$ and in one instance he has the title of Ahawa Malla. ${ }^{5}$ Who these Rattas were does not appear; perhaps they may be identical with the Rahtons. A family of the tribe is mentioned among the feudatory nobles, and will be noticed hereafter.

[^3]The sons of Teila and of his wife Jakabya wcre Satya Sri and Dasa Varma, of whom the former succecded him ; but dying without issue, was followed successively by his nephews, the sons of Dasa Varma and Bhagavati Dévi, named Vikramáditya and Jaya Sinha. The latter assumed the title of Jagadeka Malla, or "sole lord of the world," and is said to have overcome the Chol Raja in battle. ${ }^{1}$

His son, Soméswara Déva I., seems to have had two titles, Trilokya Malla, "lord of the three worlds," and Ahawa Malla, "lord of war." The same authority already quoted, describes him as "defeating Chol, burning Kanchi, besieging Ujjayana," ${ }^{2}$ and another as "cutting the necks of the lords of Malava, of Chola, and of Kanyakubja, and overcoming his most powerful enemies who had attained superiority over all." ${ }^{\prime 3}$ A third inscription makes the following vague enumeration of titles: "the elephant in the plantaingarden of his enemies, the Narendra of Chola; the fire drying up the Sea of Malava, the lightning striking the mountain-earth lords of Anga, Wanga, Khasa-Wanga, Pandya, Saurashtra, Kerala, Nepala, Turuslika, Bíra, Magadha." It then goes on with more precision to announce the following historical fact,-that being on his return from the South, where he had gained a great victory over Chol, whilst halting at the town of Puliyappayana, in the Siddha-wadi-Nadu, he bestowed the lands and villages of Sivanúr on his chief general and minister, in Saka 981.*

The cause of this expedition is explained in a curious inscription of the time of his son, named also Someswara, or Bhuneka Malla. ${ }^{5}$ The Chola Rájá, it appears, had invaded Kuntala Désa, and ravaged the southern provinces, taking and burning Pulikara Nagara, now Lakmeswar, famous for its Jain temples, which were all destroyed. After detailing the praises of the local chief who repaired them, and the new grants made to them, it proceeds thus :-" The Dher, or

[^4]outcast Chola, having forsaken his usual course, and left off practising the virtue of his race, placed his foot in the Belavel Dés; ${ }^{1}$ and having burned many temples, and acquired sin by his own hand, he yielded his head, and left his body to Trilokya Malla, and brought destruction on his race. The excellent temples which Pcrmadi Ganga had constructed, the outcast Pandi Chol destroyed, and descended to Adhogati." Latchma Mandalek repaired them, " at which time the chakra-holder (i.e. Bhunek Malla) stood in the famous place Kakaragonda, on the banks of the South Gunga (or Tunga Bhadra river), in Saka 993." ${ }^{2}$

Bhunek Malla, or Bhuvanika Malla, scems to have been a weak prince, who did not long retain possession of the crown. In Saka 998, his brother, Kali Vikram, with the title Tribhuvana Malla, expelled him from the throne and usurped the kingdom. "Bhunek Malla, having enjoyed the raj a little whilc, acted with tyranny, and oppressing the people, lost their affections. His brother was a pattern of evcry virtue.
"He by his own valour overthrowing his enemies, became lord of all the earth, with the title of Tribhuvana Malla Chalukya Vikramaditya Nripam.
"Having sct aside the ancient Saka, he established the Vikram Saka in his own name, \&c.
" 1 ll the people joining their hands stood by when he mounted the Simhásanam." ${ }^{3}$

Another inscription describes him as "attacking the goodly kingdom of Bhunek Deva Malla, and taking it by his own strength of arm in the battle-plain," and afterwards as "rubbing out the Saka," and instituting the Vikram æra in its stead. ${ }^{4}$

Tikram II. seems to have been one of the mest powerful princes of his race. He occupied the throne for fifty-one years, and of the

[^5]whole eolleetion of inseriptions, 151 have referenee to his reign alone. In Saka 1003 (the fifth of his reign), we are told that he " overeame Balavarájá, of the Palavanya or Pala raee, and sat on his throne," ${ }^{1}$ and in Saka 1010, that he "erossed the Nermada river and conquered Kanama and others." ${ }^{2}$ But in general his reign seems to have been one of undisturbed peaee. He built and beautified a town ealled, after his own name, Vikrampur, ${ }^{3}$ where an enormous tank and other works attest its former splendour. Several inseriptions make mention of his numerous wives, as that reeording a grant to the temple of Maleswar by Malabi Devi, daughter of the Shanabhag Rayana of Yelwatti. ${ }^{4}$ Another makes mention of Savala Devi, daughter of Jogam Rám, of the Surya Vansa, who reeeived from her lord the rieh village of Nerigal for pin-money. ${ }^{5}$ The names of Chandal Dévi, ${ }^{\text {b }}$ Bouta Dévi, and Letehmi Dévi, likewise oecur. Towards the end of his reign he was invaded by the Horsal Bellal, prinee of Dwara Samudra. But Aehyagi Déva, governor of the southern provinees, immediately marehed from Yerabaragi against him, "pursued the sun, illuminated Poisala, took Goveya, attaeked Letehmaji with great bravery, trod down the Pandyas and the rebellious Konkan, and redueed it to subjeetion, by order of Vikram Chakravarti."

In Saka 1049, Vikram was sueeeed̉ed by his son Soméswara III., with the title of Bhuloka Malla, or "lord of the universe," and he suceessively by his two sons, of whom the elder was surnamed Jagadeka Malla, but his own name does not oeeur in any of the inseriptions, and has not been aseertained. The younger, Teilapa II., or Nurmadi Teila, hore the title of Trilokya Malla.

The Chalukya dynasty, whieh had reaehed its zenith under the sceond Vikram, began now rapidly to deeline. A powerful noble named Vijala, of the Ralaehuri or Kalabhurya raee, had been

[^6]appointed general of the Chalukya armies ; ${ }^{1}$ and the influence which he thereby obtained he turned against his sovereign, and expelled him from his throne. Inscriptions in his name occur from Saka 1079, which is styled the second of his reign; but for several years he was contented with the subordinate style and titles of a great noble, "Mahá Mandaléswar," \&c. In Saka 1084, the seventh of his reign, he marched into the southern part of the kingdom, whither the Chalukya prince had fled, and where he maintained himself amid the forests and mountains bordering on the Gháts. Here, at Anigiri, Vijala for the first time proclaimcd hinself éka chhatra, or supreme, and assumed all the royal titles. ${ }^{2}$

We continue however to find grants by Trilokya Malla Teilapa from Saka 1072, the ycar of his accession, to Saka 1085, and these are not confined to the S. W. portion of his kingdom only, but occur in the Nizam's country, and even towards the Krishna. In Saka 1079 , he is mentioned as reigning at his hereditary capital of Kalyán; ${ }^{3}$ but in the last inscription that was procured of his reign, in Saka 1065 , he is said to reign at Jyntapúr, or Banawasi. ${ }^{\text {. }}$

His son, the last of the race, was Sóméswar IV., or Vira Sóma, who assumed the title of Tribhuvana Malla, which had previously been borne by Vijala. He succeeded to the fallen fortunes of his house in Saka 1104, and for a while upheld them. The religious feuds that raged at Kalyán, consequent on the establishment of the Lingáyat creed, occupied Vijala and his sons too fully to admit of their effectually crushing the last feeble attempts of the Chaluk princes to maintain themselves. Accordingly we find Vira Sóma recovering a temporary degree of importance. In an inscription at Anigiri, dated Saka 1106, the third of his reign, Anigiri being in the open country, where Vijala first assumed the regal titles, we find the following abstract : "In the Kuntal dés, by their wisdom and strength of arm, reigned the Chalukya Ráyas; afterwards, by conquest, the Rattas became supreme; the Chalukyas were then restored; subscquently the Kala Churyas became masters of the land; after whom, by the appointment of Brahma, Vira Chalukya Sóma ascended the throne. His servant, living by his lotos fect, Vira Bomand, the son of Ravana

[^7]Danda Nayak, like as Parasuram, son of Jamadagni, destroyed the thousand-armed, so he, having vowed that he would uproot the destroyers of his master, and make the Chálukyas again lords of the earth, became the destroying fire of the Kalabhurya Kula." Then, extolling his bravers, he is described as "driving aside Kerala and Gurjara, and making Ballam bow before him, as a wife bows before her husband." ${ }^{1}$

The limited range, however, within which the inscriptions of this prince occur, none of them being far north of the Tungabhadra, mark the partial nature of his success. One of them is remarkable as having been made on the same stone, and under a grant of Vijala's. In a contest between the Lingayats and Jains, at Ablur, about the year 1089, in which the former had obtained a decided advantage, Vijala (himself a Jain) bestowed certain rewards on the successful Lingayat dcvotee, named Ekanta Ramiah. The second inscription then procceds to relate, that at the time when " the excess of the brilliant light of Tribhavana Malla Vir Soméswar Chálukya had put to flight the darkness of Tribhavana Malla Vijala of the Kalabhurya race, Bomana Danda Nayak having re-established the whole Cháluk ya-raj, and bcing at Selihali Kop with the king, they heard that Vijala had sent for Ekanta Ramiah, and given certain grants to Soméswar Déva, of Ablur, wherefore they also sent for him and conferred other gifts upon him," \&c. It is without date. ${ }^{2}$

Such are the last records of this powerful family. What ultimately became of Vir Soma does not appear. He seems to have maintained himself for a longer period than his opponent, the last of whose grants is dated Saka 1104, while Vir Soma's extend to Saka 1111.

About this time, taking advantage of the distracted state of the country, the Bellallas of Dwara Samudra, or Halabidu, advanced from the south, while the Yádavas of Dévagiri extended their encroachments in the north, till meeting near the Krishna, a struggle ensued between them, in which the minor actors entirely disappear from the scene; and which, after various success, terminated in the Yadavas obtaining undisputed possession of the ancient limits of the Chálukya kingdom.

Vir Soméswar IV. was the eleventh prince from Teilapa I.; their reigns extend over a period of 216 years, affurding an average of some-

[^8]what more than nineteen years for each reign, -a duration equally consonant with analogy and probability.

Most of the princes seem to have been votaries of Siva. ${ }^{1}$ Their titles are mostly derived from Mahádéva. All their grants bear the figure of the Lingam, and commence with an invocatory stanza to the Varáha avatar. In several of the beautiful ruins of magnificent temples erected during their time, with which the Southern Mahratta abounds, the figure of Mahadéra occupies a central position in the sculpture over the cntrance, with Brahma on the one side, and Vishnu on the other. But at the same time the most perfect toleration seems to have been extended to all other creeds. Both the Jain and the Buddha fuith were openly professed, the former to a great extent, -a considerable proportion of the inscriptions recording grants to temples of that persuasion. The occurrence of Buddha titles in the copper grant of Vikramáditya has already been noticed; a more distinct evidence of the existence of this creed occurs in some inscriptions in a deserted temple within the Fort at Dambal, commemorating grants made by the Shetty (Sreshti, or mayor,) and the corporations of trading communities during the reign of Vikram II., Saka 1017, for the endowment of Bhuddist Vihars.

Traces of the Ophitic worship are also obscrvable. Frequent mention occurs of individuals of the Snake race. Such appears to have been the general of Soméswar I., mentioned in mote ( ${ }^{4}$ ) at p. 13. A Bhuranmati, near Bagulkotali, is an inscription made by a Mandaléswar, named Sindhu, of Nagavansa, who was born at Ahéchhatra, on the Sindhu river, where his parents had gone on a pilgrimage, and who, in consequence of a vow to the Snake king (panagi adipati), was dcdicated by them to Ahéswara. " Other nobles were of the Abehy'a racc. ${ }^{3}$ Many of the old temples are filled with sculptured representations of snakes, on separate slabs of stone,

[^9]as if they had been set up for purposes of adoration, and collections of them may be seen at the entrance of almost every village throughout the country, ranged along some crumbling wall or ruined edifice in the preciucts of the town.

These varieties of faith, and this general toleration, are the more remarkable from the spirit of religious hatred and persecution which was soon after aroused, and which remains in full force to this day among Bráhmans, Lingayats, and Jains.

## OF THE KALABHURI, OR KALACHURI RACE.

The representatives of this race were for several ages great nobles̀ at the court of Kalyán. ${ }^{1}$ The first mention of the tribe is made in the great inscription at Ye-ur, where they are said to have been overcome by the early Chálukyas, together with the Rattas. The present family, however, do not go back very far. They claim to be of the Soma Vansa in which was formerly born Sankarasu, after whom, born of a Bráhmani mother, was Krishna, who reigned over Kalanjarapura; several generations after whom was Santarasu, who appears to be múla-purush, or founder of the family. The genealogy then continues as follows :


Nothing important is known of the names in the above list antecedent to Vijala. ${ }^{3}$

[^10]The circumstances of his usurping the throne of the Chálukyas, and driving them from Kalyán, have already been stated, together with the little that has been gathered of his son's contests with them. He would probably have transmitted his throne to his posterity, had not the growing sect of the Lingayats at this time arrived at such a pitch of power and enthusiasm, under their celebrated founder Basava, as to cost Vijala his kingdom and his life.

The history of this revolution is contained in two works, called the Basava Purana, ${ }^{1}$ and the Vijala Cheritra, or Bijalenkin Kavya, the one the text-book of the Lingayats, the other of the Jains. But in both there is such a preponderance of supernatural agency, and so much legendary lore intermixed with historical facts, that it is diffcult to separate the truth from the fable.

The Bijalenkin Kavya opens with a description of Bijala reigning at Kalyán, over the Karnatakdés, in which were numerous Jain, Vishnu, and Siva temples. His ensigns were the Lion, the Bull, and the Goose ; his troops consisted of 196,000 horse, 10,000 elephants, and more than a lakh of foot soldiers. He had 1000 hill-forts, 1000 in the plain, and 1000 along the shore, and he was of the Somvansa of the race of Pandu. ${ }^{2}$

Basava was born at Bagavadi, ${ }^{3}$ in Mudibshal, a few miles N. of the Krishna, according to local tradition, though the Puran ascribes that honour to the neighbouring village of Ingleswar. His father's name was Madhu Bhatta, or Madiga raya, an Araddhya, or Saivak Bráhman; his mother was named Madalambiki," and he had a sister named Padmavati, who is described as having been very beautiful. The family seem to have left Bagavadi and gone to Kalyán, where Basava formed an alliance with the chief minister by marrying his daughter, named Gangamba, ${ }^{5}$ soon after which, Vijala having seen the beautiful Padmavati, became enamoured of, and married her; and in consequence of these connexions her brother was appointed minister and general (Danda Nayak ádipati), in succession, to his

Hindostan, from which the family seem originally to have emigrated to the South. Abal Fazl has the following notice regarding Kallinger: "Kallinger is a stone fort situated on a lofty mountain. Here is an idol named 'Kalbhiroop,' eighteen cubits in height;" \& c.-Ham. Gaz.
${ }^{1}$ There are at least five different versions of this work, two of which are Kanarese, two Sanscrit, and one Telugu. The two Kanarese versions are by Bhima Kavi and Yellendra Sadalisharapa, of which the former is most frequently met with, and has been here followed. The Telugu version is by Som Araddhya, and the two Sanscrit ones are by Shenkar Araddhya and Buslingapa.
${ }^{2}$ Vijala Cheritra, Book I.
${ }^{4}$ Local tradition and Vijala Kayya
${ }^{3}$ Local tradition.
${ }^{5}$ Basava Purana,
brother-in-law. The Rájá gavc himself up to the charms of his beautiful bride, and left all power in the hands of Basava, who employed the opportunity thus affurded him to strengthen his own influence, displacing all the old officers of state and putting in adherents of his own, whilst at the same time he sedulously cultivated the favour of the prince. ${ }^{1}$ He likewise began to promulgate a new rule of faith, ${ }^{2}$ differing both from that of the Jains and Bráhmans, hitherto the most popular sects. He abolished the distinction of castes, all his followers being enrolled by a particular ceremony into a new and equal order : he himself, and the priests under him, named Jangamas, were regarded as incarnations of the deity. They observed the same strict abstinence from animal food as the rival sects, and were equally strict and minute in the circumstances to be observed in cooking and eating, but they rejected many of the previously entertained opinions regarding purity and impurity. The great object of adoration was the Lingam, and Nandi, the sacred bull that carries Siva, of which Basava proclaimed himself an incarnation. The effigy of their creed, a small stone Lingam in a silver box or shrine, was suspended to the neck, instead of being bound round the arm, according to the practice of the Araddhyas. It is evident that there is much of the Saivak doctrines professed by the Araddhya Bráhmans to which Basava belonged, incorporated in the new creed.

Basava increased rapidly in power, and at length roused the fears of Vijala, who endeavoured to seize his person. He made his escape, however, and fled. Pursuit was ordered, but Basava collecting some of his followers, attacked and dispersed the party. His adherents flocked to him, and Vijala advancing in person to quell the insurrection, suffered a complete defeat. ${ }^{3}$ He was compelled to subinit to his victorious minister, who returned with him to Kalyán, reinstated in all his dignities. Basava, on his return, not only resumed all his former power and authority, but cven attempted the life of Vijala, probably with the intention of governing unmolested, during the minority of his nephew, the son of the Rájá and Padmavati, who is named Alya Bijal, Imadi Bijal, and Vir Vijala. In this he eventually succeeded, but authorities differ as to the manner. The Jain Chronicle relates, that the Rájá having marched against the Silahara, a rebellious feudatory, the Mahá Mandaléswara of Kolapur, was returning successfully from the expedition, when Basava fuund means to poison him on the banks of the Bhima. ${ }^{\text {. }}$ The Puran relates that

[^11]he was assassinated in the midst of his court by three of Basava's followers, named Jagadéva, Bomenja, and Maleya, while a third legend asserts, that Madawal Machenja and Bomenja, the Masalchis, or torch-bearers of Basava, having concealed their weapons in the roll of cloth serving for a flambeau, stabbed the Rájá whilst preceding their master into his presence. ${ }^{1}$ This event is said in the Vijala Karya to have occurred in the ycar 4255 of the Kali Yuga, which corresponds with Saka 1077. Vijala's death, however, according to the Inscriptions, did not occur till eleven years later, in Saka 1087, or 1088. It is probable therefore that there may be a clerical error in the MS.

The murder, however perpetrated, did not go unpunished.Basava, doreading the vengeance of the young Rájá, here named Yuva Rájá, probably the Morari Sovi Déva of the inscriptions, fled to Virishahapura, on the Malabar coast. Thither the Rájá pursuing him, laid siege to the city. It was reduced to extremity, and Basava, in despair, threw himself into a well and was drowned. His body was taken out, and ignominiously thrown without the city walls, and thenceforward the name of the city was called Ulavi, because Basava thought he would there save himself, a name which it still retains. ${ }^{2}$

The sect, however, found a more able, or, at least, a more successful leader, in Chen Basava, the son of another sister of Basava, named Aka Nagama, ${ }^{3}$ or according to others, Naga Lambika ${ }^{4}$, by whom the Lingayat belief was ccmpletely established. It is now the prevailing form of worship throughout the whole of the country where the Kanarese language is spoken, comprising the greatest portion of the Nizam's territories, the Southern Mahratta country, Sunda, Mysore, Bellary, \&c.

What was the ultimate fate of the Kulabhuryas is not known;
${ }^{1}$ Tre last is the local tradition. Sangam Busapa, Desayi of the Nalatwad Parganal in the Mudibihal Talooka, claims to be descended from one of these murderous torch-bearers.
e "Illi hodré Uliviné yenta avurillé hokadavindé Ulavi hésaru bantu." "Because he entered into that town, saying, 'If I go there, I shall be saved,' the name Ulavi was applied to it." This account of Basnva's death is entirely taken from the Jain history. His own sect declare that he was absorbed by the Lingam, or the Sungaméswar temple, at the junction of the Malapahari and Krishna rivers; and a depression in the surface of the Lingam is still slown as the spot at which he entred. Ulavi is a celebrated place of Lingayat pilgrimage, about twelve or fourteen miles west of Yellapur, in Sunda, at the foot of the Ghát leading down to the coast.
${ }^{3}$ Basava Purana. ${ }^{\text {(Chenbasava Purana. }}$
no further mention of them occurring either in books or inscriptions. The Karnataka désa now became the prey of the Yádavas.

## OF THE yÁdavas.

Two dynasties of this race successively obtained supremacy in the Karnataka Empire, as stated in the table at p. 7 ; or, rather, this supremacy was contested between them from the fall of the Kalabhuryas, and ended in the establishment of that of the Dévagiri branch. At first, however, the southern princes had rather the advantage. These were the Bellalas, or Moi Sala Bellalas, of Dwara Samudra or Dwaravati pattana, now Halabidu, in Mysore, who have been made known by Colonel Wilks and the Mackenzie collection. The only individuals of this dynasty whose inscriptions occur in the present collection are Vira Bellala and his son Vira Narasimha Déra, but the genealogy of the family is given in detail in several of these. ${ }^{1}$ Deriving it generally from Bráhma through Atri, Som, Buddha, Nahush, Yayati, î Yadu, they continue, that in the race of Yadu was born Sala, lord of Sasakapura, who having delivered a holy man from the attack of a tiger, received the appellation of Poisala or Hoisala, and adopted the tiger, or shardula, as the ensign of his family.

|  |  |  |
| :---: | :---: | :---: |
| 1. Bellala b | - 1 | - |
|  | 2. Vishnuverddhana, Visht, or Bitti Déva | 3. Udayáditya, married Lakama Dévi Narasimha, married |
|  |  | Achil Dévi |
|  |  | Vir Bellala, married Padmala Dévi |
|  |  | Narasimhe |

[^12]In the sloka, or verse, recording Vishnuverddhana, he is described as ruling from his own limits to Uchchangi Darga, and it is added, that his horses laved their sides in the Krishna. ${ }^{1}$ Uchchangi Darga is near Harponhully, to the Zemindar of which it latterly belonged, having come to him by an intermarriage with the Chittrakal or Chiteldúrg chief. This then, being the northern boundary, it is evident that he never established himself in the Southern Mahratta country, or Kuntaladésa. ${ }^{\text {. }}$ But we have seen that an invasion of the country, by a Hoisala king, took place in the last years of Vikram Chálukya II., which was repelled by his general, Achugi Déva. As Vishnuverddhana inust have been a cotemporary of Vikram, it is probable that these expressions were occasioned by the expedition alluded to, and it is not improbable that he may have penetrated to the Krishna, beforc his progress was checked. But it was his grandson, Vira Bellala, who obtained a permanent footing north of the Tungabhadra. After the usual grandiloquent boasts of "issuing his commands to Anga, Kalinga, Vanga, Magadha, Chola, Malava, Pandya, Kerala, Gurjara,' it is added, that his general, or Chenaipati, named Bomma, defeated the army of the Kalabhurya Kshétri, commanded by Bráhma Chenaipati, capturing sixty elephants. It is added, that "he destroyed the ships of the southern country," and overcame "Ballam Déra, and acquired supreme power over the whole of Kuntala Désa." ${ }^{\text {. }}$

He seems for some time to have fixed his residence at Lokigonda, now Lakundi, ${ }^{4}$ near Dambal, where are some fine architectural remains, and where the tradition of a battle having taken place between two great kings still exists. This refers to one of the engagements
temples built by, or in the time of, Bellala. The group is generally placed on the roof, in front of the goparam, or pyramidal tower of the temple, over the entrance, or principal doorway. Sometimes the figures are repeated over the side doors.
${ }^{1}$ Ins. at Gadaga, No. 2, vol. ii., p. 115.
${ }^{2}$ In another place he is said to have "conquered Kanchi and Kukhanya dés; that through fear of him the seven konkanas fled into the sea, and Virata nagara came out at the sight of his army." According to local tradition, Hanghal, on the Dherma river, is called Virat nagara; but in the inscriptions it is always denominated Panungal, P and H being interchangeable in Kanarese. The remains of enormous fortifications, enclosing a great extent, are still visible. I have got a plan, distinctly showing the circuit of seven walls and ditches on the side not covered by the river. I made an excavation in a remarkable tumulus, called Kuntawas, within the walls, but obtained nothing of interest. Ins. at Harihara, No. 23, vol. ii., p. 147.
${ }^{3}$ Ins. at Gadaga, No. 2, vol. ii., p. 115.

- Ins. No. 2, ibid, and No. 3, at Belgami, p. 118.
between Bellala and Ballam Déva, of Dévagiri, in which the latter was defeated and driven back ${ }^{1}$ from Surtur to Lokigonda ; immediately after which, in reciting his titles, Bellala assumes that of "winnowing like chaff the state of the worshipper of Narayana Chálukya," and proclaims himself the lord of Uchchangi, Banavasi, Panungal, \&c. In another place, he is styled lord of the following six provinces :-Talakal, Gangawadi, Nonambawadi, Banavasi, Panungal, and Uchchangi. ${ }^{2}$

Halur, or Hullúr, on the Tungabhadra, was likewise his residence for some time, and the plain around bears traces of an immense encampment, with erect stones to fasten the elephants, horses, \&c. ${ }^{3}$

He again defeated an army of 12,000 cavalry, and many foot, sent against him by the Dévagiri prince (probably Jayatuk Déva), under the command of his general, Soma Arassa, pursuing him from Surtur to the Krishna, and making himself master of the following fortified places, ${ }^{4}$ Yerambadagi, ${ }^{5}$ Manavi, ${ }^{6}$ Viratankoti, ${ }^{7}$ Gunati, Belatagi, ${ }^{,}$Surtur, ${ }^{9}$ Kurgoda, ${ }^{10}$ and laid siege to Dúrga. ${ }^{11}$

The influence of the Bellalas, north of the Tungabhadra, seems to have ceased with Vir Bellala. The only inscription of his son, that I have got, is from Harihara, or Hurryhur, on the south bank of that river ; and in that, the acts attributed to him are entirely confined to the country still farther south. He is described as "slaying the son of Kandava Raya, conquering Pandésa, and replac-

[^13]ing Chol upon his throne." Farther on he has the titles of a "thunderbolt to the mountain of Pandya, a Kanthirava, or lion, to Kandava Raya, like Jinardhan to Keitaba Raya, overthrowing the kingdon of Makara Raya, the confirmer of the Chola Rájá's power," and he is said to be reigning at Déva Samudra. ${ }^{1}$

It seems evident, then, that the influence of the Bellalas over the districts north of the Tungabhadra, was confined to the reign of Bellala; but even that did not extend far. All Bellala's grants occur in the space contained between the Malapahara and the Tunga; bearing dates from 1114 (the third of his reign,) to 1133 ; and the country north, to the Krishna, seems to have been frequently contested, and to have belonged, indisputably, to ncither party, though the advantage seems generally to have been on the side of Bellala.

## OF THE DÉVAGIRI YÁDAVAS.

No information is given in any of the inscriptions of the origin of this branch of the Yádavas, but it is not improbable they sprang from the Bellalas. The enmity that subsisted between the two races would induce the former to withhold all mention of their descent from their rivals, in their cnumeration of titles, and may account for Ballam being always referred to as the founder of the family; or, he may have been some petty local chief, who had risen into power, and assumed the Yadu titles. The genealogy stands thus, in an inscription at Harihara: "Sri Lebehmi, and Taradi Natha (the moon), were born from the Kshira Samudra. Soma became the first Raja in the three worlds, and in this distinguished race was born Yadu Raya, from whom descended other Yádava earthrulers. Afterwards, as Ram Krishna became sole lord of the earth by the destruction of the Asuras, so Balam Nrapa destroyed the Kshettris."


[^14]In another inscription, Kandaraya, or Kanner Déva, is addressed as "endowed with all power, the great lord of Dwarawati pura, sprung from the Vishnu Vansa, with the standard (diraja) of the golden Garuda; the sun expands the closed petals of the lotoslike Yadu Kulu, a Trinetra (Siva) to the Madana-like (Kama) Malava, the terrifier of the Gurjara raya, causing the Konkana rájá to tremble, the thruster-out of the Hoisala rayas, the restorer of the Tclunga raya, \&c." ${ }^{\prime \prime}$ The assumption of the title, Dwarawati pura varadiswar, ${ }^{2}$ seems in favour of their common origin with the Bellalas.

In a grant of Ballan Déva at Happargi, there is a historical summary of the Kuntal dés. After describing it, the statement continues, "in which first reigncd the mighty race of Pandu, and after them many others $* * * *$ of the Surya vansa became illustrious * * * * the Chálukyas, ${ }^{3}$ many of whom having reigncd with power, they were overthrown, and the race of Kalabhurya Bijala obtained celebrity by the strength of their arms, and reigned for a time; after which, the splendour of the Yadu Kula became conspicuous like that of Bhima." ${ }^{\text {t }}$

Ballam is elsewhere characterised as "acquiring the whole Karnatak dés," ${ }^{5}$ and as making a grant whilst the royal residence was at Tenavaligi, in Saka 1112. This must have been during his contests with Bellala, at which time only he is found so far to the south. ${ }^{6}$

The grants of his son, Jagatuk Déva, are confined entirely to the north of the Krishna. One of them is built into the ark, or citadel, of Bijapur.

His son, Simha Déva, succeeded in 1132, and took advantage of the death of Bellala, which must have occurred not long afterwards, to extend his power to the south. In various inscriptions, he is described as "the sun, dispelling the mistlike army of

[^15]the Karnatak sovereign," referring to Bellala, and "the terrifier of the Kalaehuri Rájá, ${ }^{1}$ as having conquered all hostile kings, and elevating his chatra or eanopy sole upon the earth, ${ }^{2}$ as the lordly elephant (Gujendra), rooting up the garden of the power of Hoisala, Bellala, and the Veinatenga (or Garúda) of the serpent Bhoja, lord of Pannala." ${ }^{3}$ In another place, his general, Hon Bomma Déva Sein Adipati, governor of Mulgund, presents him with "fourteen elephants, the best of the spoil whieh he had taken from Narasimha rassa, with great bravery, in the Konkana, whieh he eonquered by order of his master, Simha Déva, the subduer of the South." ${ }^{\prime}$ This Nara Simha is most likely the son of Véra Bellala.

Most of the Simha's later grants describe him as reigning permanently at Dévagiri, "conspicuous among the eighty-four Durgas." ${ }^{5}$

The name of his son is not recorded, but he appears to have died before his father, the latter being suceeeded by his grandson, Kanner Déva, probably about Saka 1170 , and he by his brother, Mahádéva, in $1182 .{ }^{6}$ The latter frequently assumed the title of Lord of the South Country, reigning at Dévagiri.

His son Ramehunder, who suceeeded in 1193, eloses the series of the independent Hindú prinees of the Dekkan. In Saka 1216, the Muhammedans first turned their arms against the south, and the events that oceurred subsequently, are thus related by Ferishta.
"In the year 693 A. н. (1294, A. d.) Saka 1216, Allaood Deen, after taking leave of the King, (Julalood Deen Feroze Ghiljee), at Dehly, proceeded towards Kurra, where he enlisted many ehiefs of distinetion, who had formerly been dependants of the Bulbun family. He then marehed with 8000 ehosen horse, by the nearest

[^16]road, against Ram Dew, Rájá of the Deccan, who possessed the wealth of a long line of kings. ${ }^{1}$
"Allaood Deen, arriving on the Deccan frontier, pressed forwards towards the capital. The first place of any consequence which he reached, was Elichpoor, where, having made a short halt, to refresh his army, he moved by forced marches to Dewgur, the lower town of which was not entirely fortified, the outer wall being incomplete. When the news of Allaood Deen's progress reached the Rájá, he together with his son, Shunkul Dew, was absent in a distant part of his dominions; the Rájá hastened his return, and endeavoured to intercept the enemy with a numerous army. For this purpose, he threw himself between Allaood Deen and the city, and opposed him with great gallantry, but was eventually defeated, with severe loss."

Other authorities quoted by Ferishta offer a somewhat different account, stating that when the Muhammedans arrived at Dévagiri, the Rájá himself was there, but his wife and son were absent on a pilgrimage. The Rája hastily collected a few followers, and, after vainly trying to oppose the enemy near the city, retired into the fort, carrying in a great quautity of sacks belonging to passing traders, believed to contain grain, but in reality filled with salt. Allaood Deen took the town and levied heavy contributions on the merchants, while he vigorously pressed the siege of the fort. Rama Déva at last offered to buy off the enemy, and agreed to pay him fifty maunds of gold on condition of his raising the siege. But in the meantime Shenkul Dév (Shenkar Déva ?) who had been collecting troops in the provinces, approached to attack the Muhammedans; and, in spite of his father's orders to the contrary, who wished to maintain faith, he attacked Allaood Decn, and, though successful at the commencement of the action, suffered a complete defeat.

Rama Déva then again offered terms, and was the more urgent that he only now found his provision was salt instead of grain, and it was finally agreed that the enemy should retire on receipt of 600 maunds of pearls, two of jewels, 1000 of silver, 4000 pieces of silk, and "a long list of other precious commodities to which reason forbids us to give credit, ${ }^{\prime 2}$ and that an annual tribute should be sent to Dehli.

The last condition, however, seems to have been irregularly per-

[^17]formed, for in A. H. 706, Saka 1228, (A. D. 1306), an army of 100,000 horse, under Mullik Kafoor, surnamed Hagar Dinari, was dispatehed to collect the arrears then due for thrce years. He was likewise ordered, at the instance of Kowla Dévi, one of Allaood Deen's (now king) wives, to secure and bring to Dehli a daughter namei Dewal Dévi, by her former husband, Kurrun Raj, Rájá of Kandeish, or some neighbouring country. This princess had been long sought in marriage by Shenkul Dev, of Devgur, but he being a Mahratta and she a Rájput, her father refused his consent. In his present extremity, however, after bravely defending his country, he agreed to the alliance, and Dewal Dévi, then thirteen years of age, was dispatched to Dévagiri under the escort of Bherm Dev, Shenkul Dev's brother.

Kurrun Raj soon after was totally defeated, and fled to Dévagiri, pursucd by the enemy. When close to that city Dewal Dévi accidentally fell into the hands of a Muharnmedan detachment. She was immediately sent to Dehli, and subsequently married to Khizr Khan, the king's son. ${ }^{1}$

Meantime Mulik Kafur pressed the siege of Déragiri, having previously subdued a great part of the country, which he bestowed upon his chief officers. Rama Déva snon after submitted. He accompanied Mullik Kafur to Dehli, where he was received with distinction, and reinstated in his government, with the title of Raj Rayan. Other districts were added to his dominions, among which was Nansari, in Gugraj, \&c.; le received a lakh of tunkas for his expenses in returning home. Rama Déva did not again fail to send the annual tribute to Dehli during his lifetime. ${ }^{2}$

In the year A. н. 709, Saka 1231 (A. d. 1309), he hospitably entertained Mullik Kafur and Khawaja Haji at Déragiri on their march to subdue Warangoli. On leaving them the Muhammedans are mentioned as entering the Telingana frontier at Indoor. This is the last mention that occurs of Rama Déva, ${ }^{8}$ who died the same year.

The following ycar the same generals again came to Dévagiri, on their march to the conquest of Dwara Samudra, but finding Shenkal Dev less friendly than his father had been, they left a detachment at Pytun to kcep open their communications whilst occupied in the total destruction of the Belal Yádava, who are styled by Ferishta Rájás of Karnatuk. ${ }^{4}$

[^18]Shenkul Dev showed his aversion to his conquerors more openly by withholding his annual tribute, which provoked another expedition against him, and Mullik Kafur a fourth time marched into the Dekkan in the year A. h. 712, Saka 1234 (A. D. 1312). He seized Shenkul Dev and put him to death, and laid waste his kingdom from Dabal and Chauli, to Raichoor and Mudkal, and fixed his own residence at Dévagiri. ${ }^{1}$

The latter years of Allaood Deen's reign were embittered by domestic dissensions, which encouraged the numerous conquered provinces to raise the standard of revolt. Among those who asserted their independence was Hurpal Dev (Hari Pal Déra), son-in-law of Rama Déva of Dévagiri, who stirred up the Dekkan to arms, ${ }^{2}$ and expelled a number of Muhammedan governors, and during the troubles that followed the death of Allaood Deen in A. h. 716, Saka 1238 (A. D. 1316), recovered most of the ancient possessions of his house.

But this success was of short duration. Soon after the succession of Mubarik Ghilji, he marched in person to the Dekkan, and on his arrival at Dévagiri, Hurpal Dev with his confederates, not even waiting for attack, fled in dismay. He was pursued, taken, flayed alive, and his hcad placed above the gate of his own capital. ${ }^{3}$

This seems to be the last notice that occurs of the Yádava dynasty of Dévagiri. Their capital was occasionally the scene of the contests that ensued during the final subjugation of the Dekkan, but it is only mentioned in the light of a subjugated province ${ }^{4}$ until, in A. н. 739 (A. D. 1338), Muhammed Toghluk made it the metropolis of the empire, and removed thither the population of Dehli, giving it the name of Dawlatabad, which it still retains. ${ }^{5}$

## OF THE NOBLES AND GREAT FAMILIES OF KUNTALA DESA.

The remaining inscriptions in the volume relate, some to the last great dynasty that existed in Southern India, that of Anagundi or Vijayanagar, some to the grants made by different local chiefs, and the remainder to those by village officers or obscure individuals not deserving of notice, either because the name of the sovereign under whom they were made is not mentioned, the date not given, \&c.

Of the first class (that of the Vijayanagar dynasty), the number procured is not sufficient to makc up a complete series, and more has already been made known concerning them than can be offered here. The list in the catalogue explains the names and dates, which is all the notice that it seems necessary to take of them.

[^19]The next class is deserving of greater attention. Some of the families therein mentioned, of whom insulated notices have been obtained, have been considered as independent sovereigns, though they can only be regarded as great hereditary feudatories. And in the darkness that overspreads all ancient Hindu history, and the eagerness with which any well-authenticated name or date is seized upon to fill up the dreary voids in the records of former days, it seems particularly useful to ascertain the precise power and relations of any remarkable names or titles that may be met with.

The Jain Guru of Malkheir, who has already been quoted, enumerates four great nobles of the first rank as principal fcudatories of the Kalyán state, and states generally, that there were besides sixteen of inferior grade.

The former were :-1st. Bijalenk Row, of Kalyán pattan, who is the same with the Vijala of the Kalabhurya Kula mentioned in the inscriptions.

2 dly . Jyt Pal of Amba Jogi. or Jogae Amba. There were originally five brothers of this family, from whom descended the Pancham Jains, of whom 80,000 in one day became proselytes to Basavapa, and are now the Pancham Lingayats.

3dly. Tamra dhuaj, Rájá of Latúr, near Renapúr, on the Manjera.

4thly. Gaudantin Mahárájá, of Bhir, near Kolapur. And to each of these some different office in the household was attached.

The inscriptions, however, make no mention of the second and third of these. Indeed their localities are so far removed from the scene where the collection was principally made, that the want of any record of their existence is not extraordinary.

The most conspicuous names met with in the inscriptions are,-
lst. The Kalabhurya family, of whom Vijala, or Bijalenk Row, was the most remarkable individual.

2nd. The Silaharas of Kolapur, Gandáditya or Gandaváditya; one of this race is the Gandantin Maháráj of the Guru.

3rd. The Kadambas of Banawassi, one of the oldest and most distinguished families that occur.

4th. The Rattas of Sughandavati, now Sawandati, or Samadati.

## THE KALABHURYAS.

The Kalabhuryas have already been noticed as having overthrown the ancient house of the Chálukyas to which they had long been subject. Several inscriptions of the family occur at Ingliswar, near Mudibshal (now the Jaghír of the Punt Pritti Niddhi). In one of
thesc ${ }^{1}$ a grant is made by Srí Karanam Nilkanth Nayaka, with the permission of * * * * Hegade Arasu, Mahá Mandaléswar, the sun of the Kalabhurya Kula, lord of Kalanjapur, lord of the five Mahá Sabdas, ${ }^{2}$ \&c. (with the usual style and titles of a dependent noble), the servant worshipping the feet of Bhulok Malla Chálukya, \&c., in Saka 1051. He is also called Nada Hegade, or lord of the province, and though his name is effaced in the stone, there can be no doubt that it must refer to Pennadi Déva, or Jogam Déva, the father or grandfather of Vijala.

But there appears to have been another family of Kalabhuryas, whose inscriptions occur at Rone and Sudi, near the Malapahari river, and of whom I find the following genealogies, of which I had made a memorandum at the time.


Some difference occurs in another inscription at the third step, in the line where, instead of Bom Arasu, the namc Abarasu occurs, and his son is designated as Nak arasu Simha Bhupa, which must be the same as the Simharasu in the former.

2nd. The Silaharas, or Mahá Mandaléswars of Kolapúr, have been already made known by the translation of an inscription found, and published in the Transactions of the Bombay Literary Society. ${ }^{3}$ Two inscriptions made by Gandaráditya Silahara, in Saka 1057 and 1065, besides incidental notices of them in others, furnish the following genealogies :-
${ }^{1}$ Ins. No. 2 of VIII., the Chaluk series, p. 432.
${ }^{2}$ Lord of the Pancha mahá sabda, or five great sounds, is a title always joined with that of mahá mandaléswar, and never with that of the sovereign in any of the more modern inscriptions. It does, however, occur among the titles of Pulakesi in the copper inscription of Captain Jervis.
${ }^{3}$ By Dr. Taylor, vol. iii., p. 394.


The titles of the family in the above inscription are Gandaráditya Déva, Mahá Mandaléswar, with the five great Sabdas, the great lord of Tagarapur, like Narendra among the Silaharas, born of the race of Jimutavahanwa (a name of Indra), with the golden garuda ensign, a lion in the service of his master, \&c. reigning at Walwada. ${ }^{1}$ It was probably against Vijayáditya, the son of Gandaráditya, that Vijala undertook his last expedition immediately beforc his assassination by Basava. The circumstances are thus related by the Vijala Cheritra :-" The king having bcen warned in a dream that his death approached, sent for his ministers and great officers, and committed his queen and son to their charge. All obeyed the summons, except Suri Danda Natha of Kolapúr; and Vijala, to punish him, marched against him. But when he had reached the Bhima, messengers met him from Kolapúr, offering submission, and imploring forgiveness. The Rájá received them kindly, and sent his minister to settle the terms. The minister having gone to Kolapúr, returned with a false representation that Suri Danda Natha was bent on resistance, on which Vijala marched forward and besieged the place. The resistance was obstinate, but at last Vijala advancing in person, superintended the sapping of a part of the wall; and having gained an entrance, Suri Danda Natha submitted, paying tribute and offcring gifts. ${ }^{2}$

In the third inscription of Simha Déva Yadu, ${ }^{3}$ in Saka 1137, that prince styles himself a Garuda to the serpent-like Bhoja, lord of Pannala. ${ }^{4}$ It is remarkable that both the Yadu and the Silahara had adopted the golden garuda as their ensign, which the prince seems unwilling to allow to his feudatory.

The most interesting circumstance regarding this family is their title of Tagara púra varadéswar, which from its geographical position being laid down by Ptolemy, becomes a point of great importance. As in the instance, however, of the title of the Kalabhuryas of Ran-

[^20]lanjara púra Varadéswar, it is probable that the use of the name of Tagara píra by the Kolapúr chiefs affords no clue whatever to the real position of this place. ${ }^{1}$

## THE KADAMBAS.

The traditions of this family lay claim to great antiquity, and apparently with some reason, though not to the extent of their pretensions.

An inscription at Kerguderi, ${ }^{2}$ near Hanjal, gives very full detail of the genealogy. The founder of the family was Mayura Varma, who was born on the earth like Siva, ${ }^{3}$ the subduer of hostile rajás, the sacrificer of the furious elephant bound to the white stone pillar of the Himavat mountains, the performer of the Aswa Medha sacrifice, who brought the eighteen tribes of Durjas or Bráhmans from Ahi chhatra, and fixed them in Kuntalavani, the lord of seventyseven Simhasanams, \&c.

${ }^{1}$ A native trader once told me he had passed through a town of this name on his way from Dharwar to Nagpúr, four kos beyond Kalburga. He described it as a good-sized town, with a bazaar, and a nala near it. But it was most probable he was mistaken, for had it been in that position it must have been observed by some European traveller who must have frequently passed that way.
${ }^{2}$ Ins. No. 78 of VII., Chaluk., vol. i., p. 308.
${ }^{3}$ Sasanka Mavali.

Other names occur subsequent to these in different inscriptions, as Santi Varma, Taila, Saka 1079, Karna, Sovi Déva, or Soméswar, and Víra Malli Déva, Saka 1163-73, but none of them have been referred to their exact places in the tree. Tailapa seems to have been the most powerful of the family in more modern times. He is described as "the scrvant existing at the lotos-feet of Tribhuvana Malla Vikram, the mahá mandaléswar, lord of the five great sabdas, lord of Banawassi púr; the worshipper of Jayanti Madhukéswar ${ }^{1}$ sprung from the Kahamba Chakri, who was born from the eye of Siva, master of twenty-four cities, whose eye was in the centre of his forehead, the four-armed, the performer of the Aswa medha; this ornament of his race, celebrated for the monkey ensign and the simha signet whilst reigning over Banawassi and Panungul, and residing at Pantya pura, ${ }^{2}$ \&c.," permits his Danda Nayaka, named Iswaram Euja, to make a grant in Saka 1030. ${ }^{3}$ The æra of Tailapa Radamba holding the government of the Banawassi province is thus clearly establishcd to be from Saka 999 to 1030. The number of names occurring before his in the genealogy is sixteen, and allowing thirty years to a generation, we may fix the age of Mayura Varma about Saka 500 or 520.

It would appear from the inscription given in the Appendix, that the Kadambas were one of the great tribes or families existing anterior to the Chálukyas, being mentioned as contemporaneous with the Rattas and Kalabhuryas, and their subjection was probably effected by Kirtthivarma, who must have lived nearly about the same time as Mayura Varma. They seem likewise to have asserted a degree of independence during the temporary overthrow of the Chálukya power, for their reduction is mentioned in the same authority as the exploit of Vikram I., the grandson of Tailapa Chálukya I.

Mayura Varma is still known by tradition, and is always quoted by the Haiga Bráhmans as the sovereign who introduced them into Kanara from Ahi Chhatra. When asked, however, where that place is, they profess their ignorance.

The descendants of Mayura Varma seem to have sunk into insignificance; no mention of them occurring till Saka 956 , when they are styled rulers of Panangal. It seems doubtful whether they could ever be considered as mahá mandaléswars, as they are

[^21]stated to have been under the subjection of or subordinate to other superior nobles. Thus Mayura Varma II., in 956, was head of the Hangal or Panangal alone, under the mahá mandaléswar Sriman Pegadi Madanaiya, the governor under Jaya Sinha Chálukya of Santalgi and Banawassi, whose permission is requisite to confirm Mayura Varma's grant. ${ }^{1}$ Again, in 969, Chamanda Raya Mahá Mandaléswar, lord of Banawassi, is the Kadamba superior; ${ }^{2}$ and in 997 we find them still confined to the little district of Hangal under Ganga Permadi Bhuneka Vira Udayáditya Rájá, lord of Kolapura and of Nandagiri, with the Gajindra ensign, \&c., ruling over Banawassi, Santalgi, Mandala, and the eighteen Agraharas, by appointment of Bhuneka Malla Chálukya. ${ }^{3}$

In Saka 999, however, Tailapa Kadamba became governor of Banawassi and Panangal, and as this is the commencement of the reign of Vikram II., it is not impossible that the Kadamba chief received the dignity as a reward for assisting Vikram to dethrone his brother. Frons this time the Kadamba grants continue to be more numerous, but are confined entirely to Banawassi, Sunda, and Hangal, \&c.

## THE RATTAS.

Most of the inscriptions regarding this family occur at Samadati, near Purgshur. They were of the Jain faith, and had the following titles :-Mahá Mandaléswar Katviryarasu, with the five mahá sabdas, the great lord of Attalur púr, trivati turya nirgoshanam, with the elephant signet, and the golden hawk and crocodile ensign, the sun of the Ratta Kula, whose genealogy is as follows :-


Some other names of great nobles occur, but not sufficiently identified with any particular place to give them much interest. Among these may be instanced Vir Vikrama and his brother

[^22]Yutanrapal, mahá mandaléswar governing Gutawalal, now Gutal, on the Tungabhadra. He is styled the great lord of Ujjayani-púr, with the banian-tree signet, and the Vijaya standard, \&c.; also a powerful family at Puttudkal, near Badami; Kartaviryarasu, governor of Belgavé, under Ramachandra Yadu of Dévagiri, \&c.

## Appendix, No. I.

Abstract of an Inscription at Yevur, or Ye-ur, in the Nizam's territory, on an upright stone at the Temple of Basavana, on the north side of the village.
The sun; the moon; two sitting figures; the lingam; a cow and calf. "Salutation to the varaha form of Vishnu, who dried up the bright sea, and took up the afficted earth on his right tusk.

Also to Tribhuvana Malla, lord of the earth, the pure, the limpid fountain of honour, who became illustrious in the world.

Likewise to these celebrated princes, Vislınu verddhana Vijitúditya, and many other regal jewels who have been produced in the earth, commended throughout the world, who were of the Manavyasa Gotra, the children of Hariti, who received the distinguished gift of the whitc canopy from Kounsik; ${ }^{1}$ who are supported by the seven mothers ${ }^{2}$ who obtained the lofty present of the peacock fan from Kartikeya, ${ }^{3}$ and the club ensign (Kunta dwaja), and the boar signet (varaha lanshana) from the eminent favour of Bhagawan Narayana, who subdued all their enemies in an instant, the refuge of the whole world and of the inhabitants thereof. ${ }^{4}$

Such was the Chalukya race, the preservers of the splendour of Nata; the strong-armed achieving conquest by their bow-strings

[^23]over the great power of the inimical Kadambas, lofty powerful heroes to conquer, but not to be overcome, destroyers of the authority of the Ratta Kulas and of the Kalabhuryas.

In this race fifty-nine princes were born, having supported the kingdom and passed away, at Ayodyapúra and other places; and in this race also sixteen reigned conspicuously in the Dekkan or South.

Certain generations of enemies then intervened, when again the Chálukya vansa recovered their former possessions.

The flower of the shoot from the Chálukya tree became the retiring place in which Latchmi reposed herself. Like a thunderbolt to the mountain of his enemies, or a god subduing the Dyts, the sword of Jaya Sinha Walaba, celebrated in true history, destroyed the firmly-established recent kings.

He overcame the army of 800 elephants of the son of the moon of the Ratta Kuta Kula, named Krishta. He destroyed that prince, with his army of 500 elephants. Thus the goddess of royalty (raj Lachmi) was attained by the Chálukya race.

To him was born Ranna Ragaha, desirous of attaining the feet of Hara by his good deeds; desirous of battle, of breaking the innumerable squadrons of the cavalry of his enemies, in which the swift strong horse, surmounted by his rider, is like unto an elephant.

His son was Pulakesi, the great lord of Watipipura, with a beautiful and pleasant countenance like that of Nishudan. ${ }^{1}$

To describe the praise of this Pulakesi, his body was like that of one whose hair stands (or bristles) up (kalita); he was the encourager of the learned; the performer of the Aswa medha sacrifice, distributing gifts of horses, elephants, and 2000 grants of land. His son was

Kirtthi varma, the bright light of whose fame flled the earth like a dwelling place, the axe of this Radamba pillar occupying the whole of the kingdom of Nala, which was without end, reaching from earth to Niriyan.

His brother was the fierce Mangal-isa, seizing upon the princes of the earth and ravishing the power of the Kalabhuryas or Kalachuris like a thunderbolt.

The son of his elder brother, with his family, succeeded to the kingdom of that Mangalis, who, governing the earth with righteousness, obtained the name of Satya Sri. Thus it happened in the Chálukya race.

[^24]He overcame the kings in all the four quarters, kings with more than 100 chariots; the jewel of the sca of good qualities, his aspect was the refuge of goodness.

To him was born Amara, the earth-lord, repressing the rájás contained within the boundaries protected by the Amaras (or tutelary deities of the earth).

His son, like a necklace of jewel-resembling-qualities, famed for the strength of his arm, was Aditya Varma, the acquirer of virtue, like the sea in splendour and excellence.

His son was Vikramáditya, who acquired the earth by his bravery. To him was born Yudh Malla, a prince in war like Yama.

His son was Vijayáditya, rushing into the fight alone, notorious throughout the four worlds, like Arjuna in conquest; his son was Vikramáditya, and his Kirtthivarma. After him the lord of the Chálukya power was

The son of the brother of Vikramáditya, famed like Bhuna, destroying his enemies; from whom came Taila Bhupa Vikramáditya Bhupati. His son was Bhima Rájá, terrifying his opponents.

Eujana was born to him, for the enjoyment of Chálukya authority, the thunderbolt of Krishna Nandana; to him was born Vijitáditya, dazzling his opponents; a Vikramáditya in goodncss, who married Bouta Dévi, daughter of Lachmana Rájá, the ornament of the Bhéda Vansa.

To them, as to Wasudéva and to Déraki, was born Wasudéva, and to the mountain-daughter (Parvati) and the crescent-supporter (Siva) was produced Gohari (Shenmukh). So was Taila Bhupam, surnamed Vikramáditya, to Vijitáditya and Bouta Dévi. He acquired the little raj of the Ratta Kulas, which had again overspread the land, a race proud and regardless of their gurus, whose rájás this sprout of the royal tree destroyed and cut to pieces at the Ramnasthamba; born like the Varaha awatar for the preservation of the Chálukya Raj, snatching it from the Ratta Kula, as the earth was taken from the offspring of the Diti (Narkasúra). He likewise humbled Chalya and many other princes, \&c.

The wife of Tailapa was Sri Jakabya, and their son Satya Sri, who married Ambéki Dévi. His brotler was Dasa varma, whose wife was Bhagavati Dévi, and to them was born Vikramáditya, who broke the strength of the Kadambas.

His brother was the Jaggateka Malla, whose name was Jaya Simha Rájá.

His son was Abawa Malla Déva, who, like an elephant in a
garden of plantains, trampled on the lords of Malava, of Chola, and of Kanya kubja, and gained a fame like that of Tailapa, overcoming the most powerful of his enemies, and acquiring a fame like that of Arjuna.

His son, the ornament of the Chálukya race, was Bhuneka Malla, and his brother Vikramáditya Déva, surnamed Tribhavana Malla, because he exacted homage from all worlds. They were like Hari Balaram and Soumitra Rama.

This genealogy of the Chálukya Chakravarti race is copied from a Tambar sasana; let them be honoured.

The inscription then continues in the composition of the modern writer :-" May Latchmapati Parvati pati, and Vakapati, preserve Ravi Déva the chief of the army."

He then shortly recapitulates the Chálukya vansavali, descendants from Bráhma, who was produced in the lotos that sprang from the navel of Narayana, famed for the varaha avatar. "In which race many heroes having been born, Taila the Kali (of his time) was produced, constantly opposing his enemies; whose son was Dasa Varma, to whom was born the far-famed Vikrama, whose brother was Jaya Sinha Wallaba, whose fame is perpetual. His son was Ahawa Malla, and his Soméswar, whose younger brother Kali Vikram brought the foreheads of Rájás to his feet."

The inscription then details the grant made in his reign, \&c.

Art. II.-History of Tennasserim, by Captain James Low, Madras Army, M.R.A.S., \&c. \&c.
(Continued from Vol. III., page 336.)

## CIIAPTER IX.

## LANGUAGES.

The people of this eoast are of three distinct classes, -the Burman, the Mon, and the Karean, and they are distinguished also by speaking different languages. The Burmans of Mergui speak a dialect of the language of Ava, as do those of Tavoy.

The Móns use the P'hasea Món, or Pegu language, which is quite distinct from the Burman, and the Karean tribes have languages peculiar to themselves.

The Burman language is already known to the world, from two grammars and a dictionary of it, which were published in Bengal. ${ }^{1}$ The Tavoy dialect is that, which under the title of "Burma," has been treated of in "Leyden's Comparative Vocabulary of the Burman, Siamese, and Malayan Dialects."

The Tavoy character differs in a slight degree from that used in Ava.

The Siamese language, which once prevailed in Tannau, is now only spoken by a few Siamese settlers.

The Móns employ the same character nearly as the Burmans, and so do the people of North Laos; but it would not be easy to show which of these nations was the original adopter or framer of it.

The Karcan dialects lean to the Siamese.
The Peguan language being that in most general use next to the Burman tongue, a few observations on it may be here offered.
the peguan, commonly termed the mán, or món LANGUAGE.
This is the language at present spoken in Pegu, and is apparently unconnected with the Ava or Burman, and considerably removed from the Thai or Siamese language, excepting, perhaps, in so far as respects the genuine characteristics common to all the IndoChinese tongucs.
${ }^{2}$ One by Dr, Carey, and another by Dr, Judson. The Dictionary by Dr. Judson.

The Mún seems to be neither so purely monosyllabic, nor so nicely intonated as the Thai. But its radical monosyllables have a close resemblance to those of the latter; and a great number are common to both, although the signification in each is intrinsically different,-thus :

Súong, in Mán, means drink. In Thai, if, provided.
Chep, in Mán, taste. In Thai, sick.
Kla, in Mán, means tiger. In Thai, bold, brave.
That the Mán is further removed from the Burman than the Siamese has been concluded from personal inspection, and from my having found the Burmans, who were questioned on the subject, and into whose hands a vocabulary of the two languages was put, totally unable to comprehend above a very few vocables. They could not even enunciate Mán words, from seeing them written, although the character does not much differ from their own. This is the natural consequence of the Páli alphabet having originally been tortured to suit a language for which it was never designed.

The orthography of the Mán words in the Burma character, and as exhibited here in the Roman letters, will be found, from a similar cause, at some degree of variance. The latter will be observed to convey (as nearly as our alphabet will admit of) the true powers of the letters and vocables of the Mán.

The final sounds are very fickle, such as, where $p$ is changed to m , h used for t soft, p for $\mathrm{b}, \mathrm{t}$ for d , and $r$ for $l, \mathrm{~h}$ for s , and gh for aû.

The following seem to be final consonants of the Mán Colloquial Medium :

$$
\mathrm{t}, \mathrm{p}, \mathrm{k}, \mathrm{~h}, \mathrm{~m}, \mathrm{n}, \text { (strong nasal) } \mathrm{n}, \mathrm{ng} \text {. }
$$

The voice is frequently and suddenly suspended at the end of a word, even where the short ( ${ }_{0}^{\circ}$ mark) $h$ is not used.

The alphabet is divided into five series, with ten single letters.
It appears from the above list, that the Mán has two final consonants more than the Thai is possessed of, while it trusts to a nearly similar system with that of the Thai for its initial, medial, and final vowels.

The final vowel simple sounds are fifteen ${ }^{1}$ in number; and the compound I am inclined to state at twenty-four. The medials appear to be also twenty-four in number.

The Mán admits of the following colloquial combinations of letters, which are foreign to the Thai, viz: $h$ before consonants;

[^25]hlai (clai) barter; h,moh, stone; hmain, prince; (mn) mnih (pinníh) person; (kn) knok, great; hn, liníng mo-ei, a star; bl, as in bloai-lueit, earth and sky; dap blungat, bald head. And also a frcquent use of the nasal French n, knoci, far. Ko-ein, day; Hein, a house. ${ }^{1}$ And the French $u$ or 00 (both hard and soft) recurs much oftener than in the Thai; dung, country; khling, high; púng, rice. It is also combined with other diphtlongs, in a manner not often found in the Thai, and not easily conformable to our organs of speech. These are rapidly pronounced; hlu-ein mnih, a hired servant; klíeit, a pig. Some vowel terminations resemble the Hindustani guttural gh, thus: kaa, to give, is pronounced like kagh.

However great the claim of the Mán to originality may be, when compared with the languages spoken in the countries betwixt Pegu and China, and the Burman language; still it most uncquirocally betrays its alliance at some remote period with the Chinese Mandarin Colloquial Medium, in applying to its monosyllables a system of tones differing only in frequency and intensity from that used in the latter; thus duh, hatred; dúh, ripe, as fruit; wut, forget; wút, young (female); klíng, come; klung, boat.

The following are some words selected from the Vocabulary as closely resembling cach other, to which are added a few Malay and Pali words. The words within the parenthesis are not considered.

| Mán. | Thai Yai. | Malayoo. | Palt. | Evglish. |
| :---: | :---: | :---: | :---: | :---: |
| cliep | chim | chám |  | T'aste. |
| rúp |  | rúpa | rúpa | Face, Form. |
| Arre ulr | (lau) | uruk | súra | Spirits. |
| Kuttam | po | Kuttam |  | Crabs. |
| Kappau. | pún | Kapúr |  | Lime. |
| Súm Srúm | (ngo) | úlar | Sapp | Snake. |
| Mangauf | thoei | mangko |  | Cup. |
| Sa mút | not | Simmút |  | Ant. |
| Tha | hāng | (Amas) | (So wan na) | Gold. |
| be sáe.. | (lek) | bissí |  | Iron. |
| Krít | Krít | Kris |  | Dagger. Krís. |
| Nipan | Sãivan | Surga | Níphan | Heaven. |
| Tehareul | Narok | Naraka | Naraka | Hell. |
| Wain |  | Main |  | Play. Game. |
| Sampan | $\left\{\begin{array}{l} \text { rú-a .......... } \\ \text { Sampan .. } \end{array}\right.$ | Sampan. | Nawa. | Boat. |

The Pali is also the sacred text of the Mins, and of consequence their language is much interpolated with words transferred from it.

[^26]The article in the Mán follows (as in the Thai) the noun; $k a a$ hmoh mo-ei, give me $a$ stone. It does not appear that generic particles are so much affected in defining nouns as in the Thai and Malayú; chaúh mo-ei, one tree; mníh mo-ei, one person; cho-ei moei, one straw; hein mo-ei, one house. In the following instance a suffix is used, loeit mo-ei chang, a book, or, book one writing.

The indefinite article is not expressed.
a a hein, go to the house.-Hein hmain, the king's house.
Mán nouns have no inflections to distinguish the gender, number, or case.

Hein mo-ei, a house.-Mníh kraúh mo-ei, a man.-Kon hmain preaú mo-ei, a princess.-Cheh or (kyeh) kraúh mo-ei, a horse.Kon mníh, a child.-Krauh, boy.-Pría, girl.

Particles supply the place of inflection in these instances:-and again,

Kla kraúh, a tiger.-Kla prea-aú, a tigress.-Kuchím kraûh, male bird.-Kuchím preaú, female bird.

Affixes also point out the cases, but are sometimes omitted. Thus,

Mníh kuttáún, nú hein; the man fell from the house.-Oái klúng nú Tewai; I came from the country of Tavoy.-Kluéing klúng héin; many men come to the house.-Kít ne-ung ka oei; give another to me.

To form the Plural, reduplication of the noun is had recourse to, or particles arc affixed, thus:

Kuchím kuchím; birds.-Hein klú-ing; many houses.-Krop on, few things.

Pronouns do not appear so numerous as in the Thai.
o-ei doeit a a.-I wish to go.
o-ei hú tein.-I don't know. (I, not know).
pu-eh mníh $h a k$,hah.-Thou art not (a) good man
Pu-eh a a.-Go thou.
Deh mníh hnok khah.-He is a good man.
Kunú-í a a pha-at.-All the apes go, i. e. they (the apes go)
Kyáit kláng.-Come you.
Kyáit a-a proh proh.-Go you quickly, or you go quickly.
Oei du-eit kyáit.-Your (majesty's) slave; or, simply, Sir.In reply to a question.
Tulakún Chía púng.-His highness eats his dinner (rice).
Mníh kóh rau ?-Who is that person ?
Hein peh ya la râu? -Where is your house?
Moei chí tak rau ?-What (o'clock) time is it ?

Ko-ein Kattau.-It is mid-day.
Sán mo-a chí.-How many dollars?
Kít íat ka oei.-Bring clothes (to me.)
Nú lá klúng.-Whence come ?
Adjectives are easily compared, by having words denoting increase placed after them.

COMPARISON.

1. Hein kalh kam.-A good house.
2. Hein lial ngí. - A better house.
3. Hein kah klúng. -The besthouse.
4. Mníh koln k'hal.-Hc is a good person.
5. Mníh koh khah kam.-That person is better.
6. Mníh koh khah ngee.-Still better. Mníh kolı k'hah sam phă at.-That person is best, (lit. better than all.)

The adjective follows the substantive, and the verb the adjective.

Adjectives are compounded. Mnilk puttaik kong, the brave hearted; Prúh that, noise; Saat saat, slow.

The verb seems simple. It follows the pronoun, and precedes the noun and adjective.
Present. o-ei chía, I eat; Kyeit a a hein hmein, you go to the palace (the king's house); delr kríp proh proh, he runs fast; oei klúng dúng Tawai, I come (or came) from the country of Tavoy.
Past. The adverb precedes the verb thus: deh há kyáan, he did not survive; deh hú ket, he does not want it.
And it is placed between the simple pronoun and one (or the same) representing our oblique case.

| Aorist Potential. | deh lilúng tak oei.-They (all) beat me. <br> oei hú tong man.-I cannot leap. <br> oei chú man lep.-I can write. <br> o-ei dú-éit a a raka luk,hún.-I wish to go, Sir. |
| :---: | :---: |
| Passive. Future. | o-ei dú-éit kú-íe plau ra.-I shall be sick. |
| Imperatively. | K yeit a a ra.-You may go. |
| Participially. | Chía arra,-Having eaten. |

Passively.-Here the direct expression of the action as affecting the noun is preferred. Klaau két pagoa, the dog bites the cat. Otherwise auxiliaries are used,-thus : deh teh tak, he got a beating.

The numerals have been alseady exhibited. They follow the noun in most instances.

Adverbs are generally placed before the verb to which they refer. Hméin tait a a manghet dong; the king is gone without the fort.Ala a $a$; where (are you) going ?-Oci limmah Klung; I am just
now arrived.-Kláng taup taup oei; come with me.-Sang kléng kríng; across the river.-Krop hnoh ka o $i$; give another to me.

I have not had an opportunity of inspecting any authentic poetical works in the Mán language.

The following couplets were orally communicated to me by a Meng Mán. They are in a popular style, and nearly resemble, in their spirit, the Malayan Pantún. The stanzas are composed of verses containing three lines of four words each, and without rhyme. Their verses generally contain trite allusions and obscure metaphors, admitting, in the latter case, some latitude of interpretation.

The recitative of the Máns resembles that of the Siamese, and in it, the language is much softened.

## Couplets addressed by a Lover to his Mistress.

1. 

Yú kyá yú thó. Yú tho yú sang. Rúm peng oei ngí.
2.

Yoó mein tí pre-au Kau ngí au Kíchán. Kupúng ngún ngí.
3.

Ngai máng dai heiu. Hmain ka pa koéi. Hoh rong o-ei ko-ein.
4.

Hau a a than bú-í. Bú-í ka la poh. Koll rong-oei ko-eing.
1.

A customary invocation of the Gods and Deities, previous to undertaking a journey or a voyage.

## 2.

My beloved remains at home. How can I endure the thoughts of separation? My very soul is parched with grief.

## 3.

You will remain at home, my love, while I am forced to leave you, like a timid mouse at the mercy of the cats.

## 4.

I go to prove the boisterous sea.
Dangers attend me-but my soul is overwhelmed with the grief alone of separation from thee.

## CHAPTER X.

## MUSIC.

The Burmans and Peguers delight in music. They sing generally in a high key; thus imitating the Chinese taste. Their vocal music therefore, to an European ear, appears to arise from a strained and unnatural effort.

## MUSICAL INSTRUMENTS.

The following instruments are used on occasions of ceremony, and in processions, and may be called the "out of door band." In it the Sein is generally the leading instrument :

1. Segí. The bass drum.
2. Ozí. A small drum which is held under one arm and is beaten by the hand. It is a tenor drum.
3. Sí. A drum, which in size is betwixt the Segí and the Ozí.
4. Kíwein. Small metal gongs of different sizes, ranging up to two octaves.
5. Hnć. A brass trumpet or harsh dissonant clarionet, having a wooden six-holed flute attached to its upper orifice. This is moveable, and is pulled out to a sufficient length when the instrument is to be played. A number of mouth-recds, of different sizes, are suspended from the top of the flute. The sound greatly resembles that of the Pipe of the North; and were a pibroch to be sent forth from it in one of the deep valleys amidst the Tavayan mountains, it is possible, that even a Child of the Mist might, in listening to it, be rapt in imagination to a Highland glen.
6. Pillú-í. A flute made of one joint of bamboo; and reaching to a third.
7. Pekkwé or Yegwin. Cymbals of different sizes.
8. Wá le kau. Pieces of split bamboo, with which time is kept.
9. Sein. A circular frame, having many small drums suspended from it. These compass about two octaves.

## THE CONCERT BAND, OR AUYEN. (Vide Plate.)

1. Saun. A harp, having thirteen silken strings.
2. Magyaun. The Alligator. It has three brass-wire strings.
3. Thró. A three silken stringed violin, with a very curved bow, bent with horse hair.
4. Pillúí. The flute before described.
5. Hné. The trumpet.
6. 6. 6. Ye-gwin. Cymbals of four different sizes.
1. Ozí, the tenor drum.
2. Segí.

The bands have leaders, who play the chief instruments, which are any one of the first three numbers.


BURMAN MUSICAL INSTRUMENTS.

1. Saun.
2. Pillúí.
3. Ozí.
4. Magyaun.
5. Hiní.
6. Segé.
7. Thró.
8. Ye-gwin.

The following speeimens of Burman, Siamese, and Malayan Music will save the reader the trouble of conjecturing the relative degrees of proficieney in the art ${ }^{1}$ attained by these people. The song given is a favourite one with the Tavoy fair. It is almost too idiomatic to admit of any, except a burlesque version in English.

## SONGS.

ME PYU.

1. 0 Mé Pyu,
2. Tabyen bya bein kain d'hu
3. Then yu wen gé mé
4. Thén yu wen gé mé.
5. Ten ze pi kya
6. Tha hmui hla
7. Ben ngapyo thí né
8. Thamen ku mé
9. Si byo thi né
10. Tamen ku men.
11. O Mé Pyu
12. Beit taun thu la
13. Kalún la
14. Hnin pau panza ma.
15. Hnin pan mó mó
16. Kyui so zo
17. Do galo pan bo pé.

THE LOVER. ${ }^{2}$

1. "O Maiden fair," in dark saloon,
2. Why toil at spinning whecl ?
3. Come let us go before the noon,
4. Its burning rays we feel,
5. And gather crackling underwood,
6. With which to cook the evening's food.

## THE MOTHER.

1. O daughter, whence that heavy load,
2. So soon cast at my feet?
3. 'Tis plain no wooer crossed your road;
4. Come eat this plantain sweet,
5. This seedless ${ }^{3}$ plantain eat.

THE LOVER.

1. O Maiden fair-O Maiden fair,
2. I pray you tell me soon,
3. Breathe you the Mergui mountain-air,
4. Or that of forest-wreathed Kalún;
5. Pandanus flowers your locks entwine,
6. O Gods! if such bright pearls were mine !

## THE MAID.

1. With flowers my hair is gaily bound,
2. To gather them I much have toiled,
3. Before these brilliant gems I found,
4. My brow with dust and heat was soiled,
5. If you in hymeneal bowers,
6. Desire your maiden fair to see;
7. Come pay the price of these bright flowers;
8. This shall my ouly answer be.
${ }^{1}$ I am indebted for the Burman music to Lieut. Sherman, Madras Infantry, who has also favoured me with some useful information, regarding the state of and improvement on the Tennasserim Coast, since I left it, in Sept. 1825. The Siamese and Malayan airs have been set to music by Che Draman, an inhabitant of Penang, who has been long known to the settlement as their Niel Gow; and Lieutenant Sherman has also favoured me by revising them.
${ }^{2}$ The popularity of these words depends on their idiomatic peculiarity of expression; any translation of them, therefore, into English must have a burlesque effect. They have little of poetry in them.
${ }^{3}$ The original has "seedy plantain," in allusion to that fruit being given to children on account of its nutritious quality.

## SIAMESE AIRS.




Rong rap.
(1) 4


Cha lok lo-ang.
A"


Nang nok.


Sarika kéo.
(1) 4


Nang nak.


Khamin luang án.


The King of Siam's March, or Phriy a dun.


Cha Hong.



Thewi.


## BURMAN AIR.

## SET FOR A THIRD FLUTE OR FLAGOLET.


N.B.-In playing the above Air great attention must be paid to the dotted notes and slurs, to give them their natural effect. They, if played on a third flute, sound precisely like that of the Burmese, and will agree with any of their instruments.

## MALAYAN.

Chinteh manis gunong.


Tuan tuan Nona.


Der umbun ka-terunti.



A BATTA AIR.
Dadong sidadong.


Lagu dua.


Dondang Malayu.


Ayer paxang.


Buang battu timbul kalassa.



Hati Raja Gunong.


Merahwi.


Sumbawa China.


Suka Hati.



Dondang Bangkaulu.


Lalladi lali.


1. Bunga kuchapiring kumbang dalam mangko.

2. Rangkong sudah kring mata sudah menguntu.


Radin Galuh.


Sambawa pirindu.


Linkong.



Ya Nona.


Amboi sayang.


(4)
MALAYAN AIRS.

Susah hati.


Bujang Sulong.

"Red Gold," or Amas merah.



Bujang piyatu.


Naik tingka battu pitte gunda rusa.

malayan airs

毒㬰 - …
sumg dayont









## CHAPTER XI.


#### Abstract

THE SITUATION OF MARTABAN AND TENNASSERIM, POLITICALLY VIEWED WITH REFERENCE TO BRITISH, BURMAN, AND SIAMESE INTERESTS-ALSO A COMPARATIVE VIEW OF INDLAN AND INDO-CHINESE MILITARY STRENGTH, AND PECULIAR MODES OF WARFARP.


Politically viewed, the possession of Martaban must ever be deemed of primary importance by the holders of Pegu. The Burmans are therefore perfectly aware of its value as a frontier line, and as offering the key to Siam. But by the late cession of part of it, they and the Siamese, in one point of view, have fairly been gainers ; an assertion which can hardly be denied after an inspection of the map. The great San-lun (Sanlun or Sanluen) river, running nearly in a south direction from the high range of mountains which bounds Siam, forms a well-defined line of demarcation betwixt the Burman territory and that part ceded to the British. They have retained the fortified town of Martaban, and the whole population on the north bank of the river. The ceded territory on the south bank, and lying within the province, had been for years of no value to the Burmans; and had, although once containing a numerous population, been fairly abandoned to the inroads of the Siamese. This tract is now the strongest defence of both of these people, and will be so while they keep at peace with the British; for the latter cannot admit Siamese or Burman troops to pass through their territory to attack each other, while peace remains an object. Had the Siamese not doubted the ability of the British to contend with Ava, they would assuredly have bcen sooner prepared to take advantage of our successes, by attacking and securing Tavoy and Mergui at the least for themselves. Their proceedings were luckily too clumsy, wavering, and slow, to enable them to anticipate the British detachments which took these places. Their pride and ambition were equally mortified, at the very time that their implacability towards the Burmans was gratified by the result. But their subsequent conduct showed, that they chiefly aimed at aggrandizing themselves without any serious risk; and it was on several occasions of so dubious a cast, that they were justly believed to be enemies rather than friends to the British.

Colonel Smith, who had been sent to negotiate with the generals of their army lying above Martaban, found them lavish of promises, but slow to evince a sincere disposition to co-operate. He had permitted the chiefs to send over parties to purchase provisions in
the bazar of Martaban; and it was found out soon after, that an alarming number had on various pretences remaincd in the town; and one man, in a fit of intoxication, had boasted that it would soon be in possession of their army.

Captain Williamson, who succeeded Colonel Smith, was therefore under the necessity of forthwith ordering every Siamese out of the place. After that time, several Burmans had privately stated, that a project was, at the period alluded to, in agitation by individuals (Burmans, and Peguers in their interest), to murder all the European officers, and to introduce the Siamese to the towns, who were not to appear in the business, but to give out that on learning the event, they had hurried to assist their friends the English. No public investigation of this matter took place, but it will serve to show the degree of caution with which their proffered friendship, at any time, should be viewed.

Their army, on learning the check which General Cotton had met with on the first attack of Dennobyú, which was rapidly reported all over the country, and may have reached them a week or ten days after that event, suddenly broke off their conferences with Colonel Smith, without assigning any reason, and retreated towards Siam. At this retrograde movement, his Siamese majesty was much displeased, and directed the general to return to the confines of Martaban. A party of about 1000 men lay encamped on the right of my route, from Wakru to the town; and their scouts, on seeing the advanced Sepoys of my party, fled precipitately, supposing, probably, that they formed a piquet of a large body.

There is one point of their conduct requiring attention. It is clear that amongst other objects, they aimed at setting up the ancient Món or Pegu dynasty. They were aware that the prince, who, through their interposition and aid should be placed upon the throne, would, from feelings both of gratitude and of interest, admit Siamese officers to civil and military offices, and that Siam, in fact, would virtually govern. It is well known that the Siamese then used every means in their power to conciliate the Mons; and that although they prevented many of that nation (who had been stolen or kidnapped on former occasions,) from returning to their country, yet they treated them with as much, or greater consideration, than they did their own people. In various letters addressed to British authorities, while serving in the Burman war, the Siamese court affirmed that it had permitted all the Peguers, who chose it, to return home; but it is known that the most effective part of the

Siamese standing army was then, ${ }^{1}$ as it probably is at this very moment, composed of Peguers (who are the Meen of M. de la Loubère, or Ming Mons), that the whole did not exceed 3,000 men; and the army not 10,000 , and that without mercenaries their force would have been reduced to raw militia conscripts. It is not, however, believed that these Peguers are much attached to the Siamese government; and it is supposed that the detention of their families by the latter alone ensures their fidelity.

Upon three several occasions during the war, when a great alarm was created in Bankok, by a false report that a fleet of British ships was in the river, when the people were preparing to fly with their effects, and troops were hastily got together; certain symptoms are said to have indicated that the Pegu part of the army had not only no disposition to engage in the then expected contest, but was inclined to turn against the government.

The king, it was affirmed, talked of submission, while his courtiers said, "If the country is to be taken from us, we ought not to forego it without a struggle to save our honour." After the alarms above noticed, they began to construct chain-works to throw across the river. But such an attempt would have more betrayed their ignorance than placed serious obstacles in the way of vessels navigating it; and indeed the project was afterwards abandoned. The opinions elicited by the aspect of affairs, and offered by me when employed as envoy to Ligor, in 1824, were not shaken by subsequent events, for the Siamese were not found of any service during the Burman war. They blusteringly came forward with quivers full of warlike words and promises, at a period when the "golden feet" could barely balance his tottering tiara, and proffered their aid to." exterminate the Burmans;" for this was their expression in reply to a letter addressed by the Siamese court, to Colonel Smith at Rangoon. Such an offer was in accordance with a demisavage state, and pointed out the horrid evils which would have ensued, had an army of Siamese been allowed an opportunity of settling an account of several centuries of revenge in the heart of Burma.

It could hardly, however, have been supposed, that even had they been willing to assist the British, any serious diversion could have been made in the direction of Martaban; the roads to Ava from that province are not practicable until the middle of November, and to have sent a Siamese army through Pegu would only have enabled it to follow in the train of the British in their advance on Ava; and would certainly have proved detrimental to the British interests in
the lower provinces, and obnoxious to the desire expressed by General Sir A. Campbell, of conciliating the Pegucrs and Karean tribes; for the Siamese would never have been able to proceed without plundering the people who had obtained British protection. The only quarter in which a diversion could have been effected with a Siamcse force, was either that of the castern or north-eastern frontier of Ava. The Siamese have easy access to the Martaban province by the route of the Phra Songchá, or three Pagodas, and by another pass still further to the northward, in the same province.

The Siamese are an aspiring race, yet wanting in adequate means to realize highly ambitious projects. An increase to such means as they do possess, seems to be an inevitable consequence of the late war with Ava, and this without any acquisition of territory in the direction of that state. While the Burman sway over its neighbours shall remain suspended, Siam will have leisure to strengthen herself and improve her resources; and as the military spirit of the Burmans has been checked for a season by the successes of the British, and their future condition is likely to be much more circumscribed than it has ever been since they became a conquering people, it is reasonable to suppose that Siam may in time rise to the first rank amongst Indo-Chinese States.

She will not then perhaps find it convenient to extend herself westward, but the Malacca Peninsula, exclusive of the British possessions, lies before her an easy prey, unless British influence be interposed to check them. These last may not be endangered, but they will certainly be exposed to annoyance from misunderstandings with the Court of Bankok, in reference to relations or existing treaties with Malayan Rájás. Siam will likely also turn her attention to Camboja, and the tributary States of Laos, which cannot be supposed capable of resisting her long. She has indeed been carrying on a sort of predatory border-warfare with the Cochinchinese or their tributaries during the last two years. The Cochinchinese are, however, a warlike people compared with their neighbours, and may some day retort on Siam with interest. From the earnest inquiries made at Penang by several Cochinchinese men of rank respecting Junkceylon, it is conjectured that they would be glad to have it as a post from which to annoy the Siamese possessions on the west coast of the Peninsula of Malacca. It is well known that the governor of the Lower Provinces of Siam, generally callcd the Ligor Rájá, has on several occasions manifested an inclination to assert independence. Were the Chinese in Siam to confederate with the Cochinchinese and the Ligorian, Siam would most probably be sub-
dued. The British would then have a much more enterprising people than the Siamese, fond as these are of dominion, to guard against in the Straits of Malacca.

The Siamese materiel is supposed to excel that of the Burmans, but their mode of fighting is nearly the same; one, which, if the expression be allowable, is defensive, while it is most actively offensive.

We have seen, throughout the late contest with us, the Burman capacity for war displayed to its fairest advantage, and are sufficiently warranted in forming conclusive inferences regarding it. Any person who was a spectator of the events of the war, can have little hesitation in affirming, that as a military nation, which it has ever professed to be, Ava occupies a grade below that of any firstrate or well-constituted native State in Hindústan. To this remark it may be objected, that had the Burmans not been a brave race, they could not have protracted the war so long.

In reply to the objection, it may only perhaps be required to state that the Lower Provinces of $A v a$ (or Pegu), and a great proportion of Ava proper, are so densely covered with jungle, that the Burmans, without even the cautious demibarbarous courage which we may fairly allow them, would always have, as they had during the late war, the advantage of attacking unseen, and of retreating to places where no regular troops could follow them with the slightest prospect of success. But natural obstacles to the progress of the British detachments would have been of little avail to the Burman army, had the Ava Court relied on its courage alone for the issue. That Court knew the character of its troops too well to expect from them either enthusiasm or devotedness, and therefore wisely relied on a coercive system; that such a system is not inconsistent with the securing of military supremacy, is amply testified by dear-bought experience in Europe. Its perfectly despotic nature, too, enabled it to bring into full play every mean or energy the country possessed, and so far as this admitted of, to exhibit an arrangement most consistently efficient throughout its various ramifications. The Burmans are a military people, because it has been the policy of their rulers that they should be so, and not because they are impelled to arms by a lofty warlike spirit, or ardent attachment to a leader. This policy, by fostering an undue degree of pride, had given to the Burman a rather martial appearance; had deceived him into the excusable error of widely overrating his own capabilities, and thereby armed him with an audacity and confidence which, at the breaking out of the war, served him instead of high courage. The moment, however, that his self-complacency was disturbed by a reverse, and
the delusion was dispclled, he threw down the enchanted arms ${ }^{1}$ and fled; or, bewildered by the sad reality to which he became now for the first time awake, submitted himself to the bayonet without a struggle.

It is well known that the nearest relatives of a Burman officer or soldier, are security for his fidelity.

This was not at first of much use, further than preventing them from deserting their colours. But latterly desertions became so frequent, that it may be presumed the law had relaxed a little in its operation, or had been really found insufficient to overcome the terror which the British advance had spread over the country.

The Burmans adopted a mode of fighting the best fitted to their encounter with an enemy superior in discipline and tact; and lad they kept solely to their stockades, and defended them with the spirit which most Hindu garrisons similarly placed would have shown, there can be little doubt that they might not only have prevented the Rangoon division from penetrating the country beyond that place during the first campaign, but would have certainly protracted the war to a much longer period than it endured. When they changed their plan and invested Rangoon, they suffered accordingly, and severely.

Many instances are on record of Hindu garrisons in India defending a breach with obstinacy, and disdaining quarter; but the Burmans did not collectively do so upon any one occasion during the war. As to individual displays of bravery, these occur amongst any people, and are not, thcrefore, available for argument, nor have they ever fairly met British troops in the open field. It is true that throughout the contest many lives in officers and men were lost, but such is the sure consequence of attacking an enemy, so situated, that without much danger to himself he can deliberately deliver his fire when an attacking column has approached within thirty yards of him; and while he cannot be prevented from safely slinking into his jungle, in the peculiar manner of Burmans and Siamese. Their movement is rapid without the appearance of running, and an army of ten thousand men will seem to melt into the forest, and leave no trace of their route.

There can be little doubt that the Burmans improved by the experience they so dearly bought, and that their works, from the storming of their fortified camp at Kokain, to the taking of

[^27]Dennobyú (both included), assumed a more commanding shape than their former, generally squarc, stockades exhibited. The construction of the latter would have rendered it proof against any attack not directed and guided by European skill. It was in the opinion of scientific engineers, a chef-d couvre of Burman ingenuity and perseverance. Its main strength lay in the outworks, not in the stockade, and it may safely be affirmed that the chevaux de frise, abattis, trous de loup, \&c. \&c., with which it was environed, presented an impassablc barrier to troops. Nothing but shells and rockets, or regular approaches and mining, can be successfully employed against such a work. The two former missiles were guarded against by the Bundúla, or General, who secured his men from their effects by lodging them in deep holes and covered ways.

Since the war terminated, the Court of Ava has unceasingly exerted itself to re-arm its disorganized militia, and to restore confidence. It has encouraged the resort of runaway European soldiers and sailors, who are engaged in teaching its troops the use of the great guns and the advantage of discipline, and its officers proudly talk of the experience they have gained. They acknowledge that they never supposed troops would attack so openly as ours, and that their true policy would have been to throw the door open to us, and then to have closed it when we had got beyond our resources. If they assume such a haughty tone so recently after defeat, what may we not expect from them a few ycars hence.

The investment of the great Dagon Pagoda was their boldest attempt during the war,-here they advanced within point-blank musket-range, burrowed like rabbits in the holes they had scooped out for themsclves on the retiring side of a hill, and bore for six days a hot fire of shells and round shot. Here also several of their invulnerables daily exposed themselves to the opposite fire, making grotesque and menacing gestures, and exclaiming in these terms, "O white men, tell us where the Burmans are now ?" The British soldiers were so much amused with the exhibition, that they did not fire at these champions until they became too annoying with their jinjals and small guns.

The religious vow which this party of their troops is said to have made, that they would carry the. Pagoda (then the British General's head quarters), or die at the feet of their great Phra, or Statue of Buddha, failed to inspire them with durable courage; for when they had reached the spot, their forced enthusiasm evaporated, and their commanders in the rear procecded as usual to decapitate those who gave way, in order to retain the rest at their
posts. The Burmans are not only inferior to the Indians when defending their stockades and fortified positions, but they are decidedly so in the field, if we are to judge from the different manner in which British troops have respectively been opposed by both. This may arise from habit and early tuition; for a Burman deems it the height of folly to expose his person, and thinks it much more praiseworthy to subvert and destroyzhis enemy by subtlety, than by open warfare.

The Burman matériel is not to be compared in quality to that of any native powers in India. Except at Dennobyú perhaps, and wherever their position could not be quickly approached, they rarely fired their guns twice during a close attack; and their muskets, without bayonets, however serviceable they proved behind a stockade, where a deliberate aim could be taken, and where a match could supply the place of a lock, were for the most part so old that they would have served only to hasten their confusion and consequent destruction in an open fight. Except short swords and spears, they had no weapon on which to rely, in elose combat after they should have fired their muskets, since these have no bayonets. They are well supplied with ammunition, as they have mines of lead-ore, and manufacture gunpowder. Their spears are long, and their swords are desperate weapons in close combat, when opposed to swords of the same sort, but useless against those of Europeans, or when opposed to a bayonet. The metal, too, can hardly be termed steel, as it is generally easily bent. The swivel jinjal is the only fire-arm they have perfect command of, and it proved perhaps the most destructive one.

We cannot much condemn a Burman or Siamese soldier for the unwillingness he shows to fight. He has no common cause with his rulers to stimulate him to action; the bare excitement of pay which the merest mercenary in a European army receives, is denied to him, unless on momentous occasions (such as when the British were advancing on the Burman capital), and in the advantages accruing from his forced services he is not a participant. He has but rarely, also, the consolation to see his general sharing with himself the danger of the field; and he is aware that his superiors have not the slightest sympathy with his sufferings.

It is obvious from the whole features of the Burman war, that the strength of the Burman field army did not, at any one time during its continuance, exceed fifty thousand fighting-men; and, that in this number, not more, certainly, than five thousand were armed with perfectly scrviccable muskets. Garrisons are nut here included
in this enumeration, nor are the countries of Assam and Arracan, and districts to the north and north-east, not properly Burman. Several prisoners taken during the war, and other natives, stated to me, that one good musket, in their acceptation of that term, and two old ones, were allotted to every ten men; and that one gun and three jinjals were allowed to every company or band of one hundred men. By the average of the table annexed, it appears that 823 muskets of all descriptions were served out to 4,600 men.

It is exceedingly to be questioned if the Burman dominions contain the population hitherto assigned to them by Colonel Symes, Captain Cox, and other writers. The former states it at $17,000,000$, and the latter at 800,000 . Such a discrepancy must necessarily lead us to infer that both statements have been given at random; and chiefly from native estimates purposely misstated. Had either of these respectable authorities obtained access to the registers of population which we know are kept by the governors of Burman provinces with scrupulous exactness, we should not at this moment be in doubt regarding the true extent of it.

When questioned by foreigners on the subject, the pride and policy of the Burmans have always led them to exaggerate the number; and it is not improbable that the former have sometimes misapprehended the term lakh, which, throughout Ava and other states to the eastward, signifies only 10,000 instead of 100,000 .

The combined forces of the Bundúla, or general, whether at the period of his investing Rangoon, or at any other, during the war, did not, it is believed, exceed fifty thousand men of all descriptions; but we may allow ten thousand for desertions as a maximum, and another ten thousand for followers, who had to carry stores, ammunition, \&c., which, however, are only here admitted with the view of elucidating the subject, and of conceding as much as can possibly be expected by those who rate the populousness of the country higher than here stated, even although not at so high a standard as the writers alluded to have done.

During those prosperous periods when the Burmans felt little resistance opposed to their ambitious career, it seldom happened that to meet the supply of men for any distant expedition they found it requisite to levy more than one man from every third house. One man from each fifth house was a common rate.

It cannot be doubted that the late war called into action every able-bodied man in the empire, and that since the days of Alomméndra or Alompra, the defensive resources of the country have
never been so harshly expcrimented on. It is also known that every serviceable man in the kingdom is registered, and that although substitutes are admitted, and individuals may elude service by paying a stipulated sum of money, yet that the population is not so wealthy as to induce a belief that such measures are calculated to weaken much any levy en masse.

It is likewise known that the M6n, or original race of Pegu, had not bcen altogether exempted from military service, and that if they were not trusted to any great extent during the war, their labour in the minor departments of the army was not dispensed with. ${ }^{1}$

It has been admitted, for the sake of argument, that the forees of the $\Lambda v a$ State amounted to 70,000 men of all ranks and descriptions, and we may safely state the proportion of this number to the actual population, as one in five, or one man for each house; this will therefore give 350,000 souls for the population of Ava Proper and Pegu. There is every reason to believe that the country to the north-east of Pegu, including Martaban, does not contain, at the utmost, more than 80,000 souls; and perhaps the remainder not more than 100,000 .

But as the Burmans did not implicitly trust the Mons, and permitted them to continue in some measure the labours of the field, on whieh their own existence during the war in a great degree depended, and as it may be supposed that they had not left all their frontier posts defenceless, we may admit another 100,000 inhabitants for the supply of the latter; or 20,000 fighting-men. To the aggregate remains to be added the various Karean tribes seattered over the country, which I loosely rate at 200,000 ; and the inhabitants of such frontier provinces as have, from their distance from the seat of power, been enabled now, as heretofore, to eseape military scrvitude. At a maximum, we shall take them at 100,000 .

By this mode of reckoning, the whole of this vast region of Ava Proper and Pegu will only be found to contain 930,000 inhabitants. Or the minimum may be rated at 900,000 , and the maximum at $1,000,000$; a conclusion whieh may be retaincd, perhaps, so long at least as no other data exist, from whieh elearer inferenees may be drawn.

Some Burman rolls picked up by me on the field at the attaek of Kokain in Pegu, immediately after the foreing of the Bundula's lines, elucidate some part of the foregoing details. ${ }^{2}$

The columns are ruled out in the originals, and accurately

[^28]preserved. The names of the chiefs and the men, the relatives of both, their districts and villages, and the quantity and quality of military stores, money, \&c., served out to them, are minutely noted down.

When the Bundúla was signally defeated, and driven by thirteen hundred British out of this strong position, he had not, assuredly, more than ten thousand men whom he could rely on to defend it; the rest were seen to withdraw before the attack commenced.

Amongst the prisoners on this occasion, were boys of ten or twelve years of age, whom the miserable parents, the victims of oppression, had been forced to drag with them from their houses, to assist in carrying stores.

The Burmans are expert in the choice of strong positions. Nothing could have been more judicious, and for a nation like them, not very far advanced in civilization, more scientific, than the selection of ground for the investing of Rangoon. They occupied a line, which, could they have maintained it, must have cut off every communication of the British army. The Burmans make, in their wars, regular approaches, like the Siamese, by trenching. ${ }^{1}$

Nothing has more served to convince the Burmans of their inferiority in the field, and also behind a stockade, in the presence of British troops, than the dreadful practice which the howitzers made on them at different periods. The unerring effects of these, and to them the serious novelty, of Congreve's rockets, joined to the incomprehensible movements of the steam-vessels, and the steady advance of the British troops, Europeans and sepoys, in column or line, up to their strongest works, sometimes without firing a shot, and generally without firing until each ball told death, have made an impression on the minds of the Burman private soldiery, which ages are not likely entirely to efface, and have furnished materials for a tale which subsequent generations of Indo-Chinese will read with awe. Yet the court, and its ministers, its governors, and war-chiefs, profess to have learned a good lesson in the military art, and betray no fear; and so long as the sinews of government hold together, the fears of the multitude will be concealed by them, and wielded to their own purposes.

When the war had but commenced, the Burmans looked on our sepoys with contempt; and they eyen beheld European troops with indifference. The first impression was owing to their confidence in
${ }^{1}$ A curious Siamese history is in my possession in which the art is treated of; and a varicty of adventures related which befell two rival Indo-Chinese princes, while digging to circumvent and entrap each other.
superior muscular strength, and in the second instance they were probably partly swayed by the same idea, and partly by an opinion unfavourable to British prowess, derived from what they had formerly observed, or had been led to believe existed, in the conduct and demeanour of the individuals from various European countries resident in Rangoon; who, whatever might have been their inward sentiments, were obliged to repress any national or indignant feeling in the presence of a Myúwún or his minions.

They have since had sufficient cause to alter their opinions regarding both descriptions of troops when in the field. But their pride revolts at conceding any degree of superiority to the native troops, who are more closely allied to them in complexion and habits. It cannot be denied with reference to mere animal strength, that sepoys of the common standard height are certainly inferior to the Burmans, and there is little doubt that many of the latter possess muscular strength in an equal degree with Europeans. This plainly indicates the necessity for great care being taken in the selection of sepoy recruits, and there can be little doubt that men sufficiently athletic physically to cope when armed, with Burmese or any other eastern people, may be with some pains procured in India. In the open plain, however, Burman troops are little better than a disorderly assemblage of ill-clothed men, without any very distinguishing badges, and totally unacquainted with the evolutions requisite for the preservation and direction of large bodies, in face of a scientific and manouvreing enemy; ten thousand of them would not, in all probability, stand a charge in the field, of a regiment of well-disciplined troops, whether European or native. They have left this matter, and wisely so, to be questioned; but scarcely, one should think, to be doubted. Had the termination of the war rested on the result of one or more pitched battles in the plain, it must have been over in a few months.

The following is the common arrangement of a Burman army according to the information collected in their country.

The Bundúla or commander-in-chief, has unlimited power over his troops. His fiat is sufficient warrant for a military execution; and it is well known that the late Bundula made an unrelenting use of this prerogative, and that the almost last act of his life was the decapitation of the commandant of his artillery, for permitting the steam-vessel to pass the works of Dennobyú.

The Chekk,hé and Nak,han, with a Bodayé, or Secretary, may be deemed the staff of the Bundúla. There are several B6 or officers, who command indefinite numbers of men. The rest of the system is a
decennary one; the army is divided into lacs, ${ }^{1}$ or tens of thousands, lí tataun, or thousands, and lú taya, or companies of one hundred men each. Besides the superior B6 placed over the larger divisions, each company is commanded by an inferior B0, or captain, and he has under him two inferior Chekk,hé, and also a Nak,han and his assistant. The Tamú, who is a sort of quarter-master, has also charge of military works. The Thái than kí, or officers subordinate to these, and the captain ; every lí tache, or tenth part of a company, is under the direction of an Akyat (or Akyaup) or noncommissioned officer, and below him is a Tacha, whose duties resemble in most respects, those of an adjutant to a British regiment.

The Burmans place implicit faith in talismans and auguries. The former are generally written upon sheets of gold or silver, when it is intended that they shall be inserted beneath the skin of the person who is to wear them. These slips are about half an inch square, and are most frequently introduced under the skin of the arm. The operation of tattooing, which gives to the limbs an appearance of being clothed, is also an essential one for a Burman soldier to undergo, as it is supposed to shield him from danger, besides being a sign of manhood. He is not singular, however, in this case, for all ranks are more or less tattooed. The Siamese consider the practice as barbarous; but it is probable that pride, and a wish to appear a perfectly distinct people from their hereditary enemics, the Burmans, had induced them at some former period to relinquish the custom; for the Laos or Lau nation, from whom they branched off, still retain it. Several English officers out of curiosity (for which some may think they paid dear,) underwent the operation of tattooing on various parts of their persons. But as the operators were not copiers of the graccs, or very select in their choice of subjects, it happened that they produced representations of the most motley groups of things, animate and inanimate. Some of these would have made Linnæus and Buffon, had, they been alive, stand aghast at their ignorance of the productions of Ava forests, and would now draw copiously on the faith of antiquarian societies.

Although the Burmans occupy a middle rank in the list of warlike nations, yet the question naturally arises whether their inferiority is not more owing to despotic institutions, than to mental or physical incapacity; hence another question follows, Would the Burmans and Móns (or Peguers) make good soldiers if disciplined in the European manner?

A satisfactory reply to this last question would likewise solve the

[^29]first; but we have nothing deduced from experience on which we can safely rest an opinion, and must therefore draw inferences from a general view of moral and physical peeuliarities observable in the people alluded to.

In so far as religion and morals are concerned, the Burmans and Móns stand nearly upon an equal footing; to the first they arc firmly, but not bigotedly, attached, and in their morals they are upon a level with most Indian nations. This may not appear the case to a superficial observer, who may be inclined to attribute to them more vices than to the natives of Hindústan, because he is not aware that they take less pains to conceal them than the latter.

Their religion is free from the prejudiees of caste, and none of its ordinances interdiet any one from following the profession of arms. It is true that the shedding of blood is positively forbidden by the Buddhist religious code; but with these people custom, supported by pride and passion, has produced the strange anomaly, that while scrupulously refraining from bestial sacrifices, either for sacred purposes or for food, they, like the Siamese, feel no compunction in taking away the life of a human being for a very trivial civil offence, or in the pursuit of ambition and revenge. Their conduct in these respects, and in war, contrasts strongly with their behaviour in private life. Fond of innocent amusements, mueh attached to their families and relations, free and hospitable in their social intercourse, many of their errors may well be attributed to the defeets and vices in their government.

There is no military caste amongst the Burmans or Móns, nor are their youth trained systematically to exercises which tend to foster a martial spirit, if we except the forced duty they have to perform under the conseription system. The latter are more patient of toil than the former, and possessed of greater bodily strength to support it. In robustness of frame they surpass any people scen by me eastward of India, with the exception of the Chinese, and several tribes of the Kareans. It is by no means certain that the settled Kareans with these advantages would prove more tractable as soldiers than the Burmans. Their habits are decidedly agricultural ; and their long subjection to Burman rule seems to have tinged their minds with some of the vices or faults inseparable from abject submission. These may be gradually overcome by mild institutions, but they at present check the spirit which entitles a soldier to the confidence of a government. Like the Malay, a Món or Burman often prefcrs a pittance procured by a little exertion, to good wages obtained by steady labour. Rice also is so abundant and cheap
throughout Pegu, and along the Tennasscrim coast, that a family consisting of five persons ${ }^{1}$ may be well clothed and subsisted for a year, for eighty rupees, and even for less.

The unsettled Karean tribes are not more fitted than the Mons for the profession of arms ; and were they otherwise, their wandering habits and impatience of control would preclude them from being useful as soldiers. They are, however, reckoned individually brave.

There is this one point of view, at least, in which the preference may be given to the Mons before the Burmans, with refcrence to any probability which may exist of their ever being introduced into the British army; that as the feeling which bound them to their own line of kings has been nearly lost, they are prepared to obey any authority which superior strength may place over them, and chiefly that authority which may seem to open to them a prospect of escaping from Burman rule. The bulk of the population yet retains a deeply-rooted hatred of the Burmans, and in so far as can be now perceived, might be used against them with advantage in the shape of irregular troops. As, however, a considerable portion of Peguers are connected by marriage and other ties with the Burman population in their country, these might, perhaps, lean to the latter, or be indifferent where exertion would be required to act against them.

If an experiment were ever to be made with any of the classes alluded to, with the intention of forming them into regular troops, it would be quite indispensable that they be taken from their homes at an early period of life. They might then, like the Malays who formed a regiment at Ceylon, make useful soldiers in a close country, and perhaps on the plain.

The peculiar locality of the ceded half of Martaban, close on the frontier of two of the most powerful Indo-Chinese states, whose mutual dislike to the British may render each dangerous in its turn, and may even lead at some favourable period to their temporary coalescence for aggressive purposes, will of course call for a corresponding degree of foresight in those who may have charge of the British position, and an adequate number of troops for its defence.

All that is now wanted is the separation of the Mons or Peguans from Ava, but it is very doubtful if their ability will keep pace at any time with their inclination to assert independence, or if a sufficiency be left of that spirit which led them once to give laws to the Burmans.

[^30]Tennasserim being a narrow strip of land, bounded everywhere on the east by the Siamese territory, would in times of war require a much larger portion of troops for its complete defence than a country of greater extent, but more compact, would demand in the vicinity of such a power. The dividing barrier of mountains is so wild, and the skirts of these on the west side are so destitute of fixed inhabitants, that a Siamese army might invade the coast of Tennasserim before any information could reach the British forces in their several stations. They might build light boats at or near the sources of the Tennasserim rivers or their branches, and pass rapidly down to the sea; and they have the maze of Islands betwixt Mergui and their own portion of the coast to shelter them, and aid a retreat when required. They are not, it must be noticed, a seafaring people; and will never venture to cope with any European force on salt water, although it is possible, that with a great superiority in numbers, they might do so in the smooth river. We may, perhaps, rely on the Siamese remaining peaceful neighbours, so long as they refrain from intriguing with the Indo-Chinese, or with European powers, so long as they shall see an ascendency in the Malacea Straits, and our superiority in position and military power over the Burmans ; and also while they find it prudent to look on the Burmans as an enemy only dormant through the effect of circumstances, not inclination.

## CHAPTER XII.

POLITICAL GITUATION OF THE INDO-CHINESE STATES, GENERALLY CONSIDERED WITH REFERENCE TO THE BRITISH POWER.-POLITICAL SITUATION OP THE BRITISH IN THE STRAITS OF MALACCA, WITH REFERENCE TO LOWER SLAM AND MIALAYAN STATES.-SUPPRESSION OF PIRACY.

The subjugation of Keddah by the Siamese, and their late intrigues at the Malayan State of Perak, both of which countries bound our possessions, together with the recent insurrection in Tavoy Province, which if not directly instigated, has assuredly been countenanced by the Burman Court, naturally lead to some reflections on our former political relations, and on the probable future results of our existing ones, with both that Court and Sian. With reference to the former, it might have been expected that the change from a harsh despotic rule, to one so temperately restrictive as that of the British, would have placed the Tavoyers in a state of repose and comfort to which
they and their ancestors had ever been strangers. And the enlightened and humane policy of the supreme government towards them, in common with the other natives of the ceded territory, when carried into operation by the chief local British authority ${ }^{1}$, whose experience and proper feeling towards the natives are well known, ought to have secured their attachment, and hastened their improvement in the social scalc. To what, therefore, so unlooked-for a state of things has been owing, remains to be shown.

If the Ava court was not the instigator, they may have entertained over sanguine ideas of the advantages to be conceded to them; or the new and strange feelings engendered by the unwonted freedom they have enjoyed, may perhaps have urged them to make an intemperate use of that liberty. It is probable, too, that some of the minutiæ in the local details under inferior native officers, may have been unpalatable from their novelty.

The direct views of Maungda, the Chief of the insurrection, cannot easily be conjectured, unless under the supposition that he acted in the hope of support from Ava. But his communication with Ava was apparently cut off by the force at Amherst; and the territory of Siam bounded his prospects on the south and east.

Of this, however, he might have been sure, that a rebellion, whether successful or otherwise, could not have failed to gain him high favour at Court : and his followers, doubtless the most turbulent class of the population, were certain (as the sequel has shown) of enriching themselves by the plunder of the British officers and others.

The local assistant to the Commissioner ${ }^{2}$ very promptly stopped the insurrection. A reward was offered to those who would seize Maungda, and assist in restoring quiet. The small party of sepoys were again marched into the town without any very material opposition, and Maungda and his principal adherents wcre tried and executed. ${ }^{3}$

[^31]${ }^{3}$ Since the above was written, it has been discovered that the alleged cause of the revolt, the revenue arrangements, put forth by the Chief Maungda as an excuse for his rebellion, cannot be admitted; since it is known that this revolt was a partial one, and was confined to a refractory and seditious set of men, who paid hardly any revenue, and who expected to be great gainers by a change.

Maungda was well known to have been a traitor on several occasions to his own government; and those who joined him in this last attempt had been for the most part officers of the Burman government. The lower classes were overawed after having seen our troops evacuate the town. Had the officer in immediate charge at the time been sufficiently experienced (for he was only acting in the absence of Major Burney), the affair would not have proceeded to the extremity it did. By not instantly seizing Maungda and the other ringleaders, and remaining in the town,

Reverting to the character for fickleness which the inhabitants of the town of Tavoy have long bornc, and to this event before us, the inference is obvious ;-that the British local authoritics are subject to be sold in their turn to the nighest bidder, whether Burman or Siamese. Treachery is always strong for a scason, and can never he effectually guarded against, however possible it may be afterwards to visit the authors of it with excmplary punishment.

The laws which self-interest has rendered in a great measure reciprocally binding on European nations, carry little weight along with them when forced on the anomalous field of India, both within and beyond the Ganges, where they are not understood. Natural obstacles, such as mountains and deserts, have ever in these regions been the only ones to aggrandizement. No balance of power could ever be long maintained amongst a number of dissimilar states and tribes, all thirsting for supremacy, but by the intcrvention of a people, able by themselves alone to direct and control the whole.

Events have shown also, that the policy which, from their peculiarity of situation in India, the British have there pursued for a considerable number of years back, and which necessity, if not reason, fully justifies, is quite inapplicable to Indo-Chinese nations in their present stage of civilization.

India has been from remote times more or less connected with the hardier races of the West ; and her princes and people have had frequent opportunities of determining with a pretty fair degree of accuracy their relative rank amongst the nations on the globe. The Indo-Chinese states, on the other hand, have only admitted a very limited intercourse betwixt them and Europeans, and other western foreigners. Hence their ignorance of their true position. But their pride transcends their ignorance,-and both together would at any time be sufficient, under apparently promising circumstances, to urge them to brave destruction. Their intercourse with Europeans has bcen, until very lately, purely commercial : and individual private
every advantage was given to them. That this might easily have been done is quite evident from the fact, that the same force which thus evacuated the town retook it six days afterwards, although Maungda and his followers had increased from a handful of men to about 1300 strong, and had been enabled to collect guns, jinjals, ammunition, and other means of offence and defcnce, in which they were before wauting.

The exccution of Maungda and his principal adherents was fully merited by them. It will also have the salutary effect of rescuing the people from those retaliative measures, with which that chief or his associates would have visited them, in the event of these provinces being given up.

It came out on the trials that Maungda was in correspondence with the Court of Ava,
traders in these latitudes are, we know, the very worst preservers, in their own persons, of national honour, as far as contempt of our power is concerned : their safety and their success alike depending on their holding out the olive branch under every variety of usage: and on an unconditional compliance with local prejudices, and perhaps with repulsive customs.

European nations are, in point of intelligence, nearly on a footing of equality amongst themselves,-and their acts are so far mutually binding. The Indo-Chinese states, or people, on the contrary, are not only deficient in knowledge, but totally wanting in political and national integrity. In national integrity they are deficient, because they live under ignorant despotisms, where there are no tests of public opinion. European nations have such tests for their general guidance, even where despotic principles prevail, to which to appeal in cases of need; but amongst the native powers of India and Indo-China to what public or political umpires shall a case be submitted by them, unless to those which are set up by self-interest and the passions.

Any European power which should enter into a formal treaty with a first-rate Indo-Chinese one, must either do so under a determination to keep it no longer than may be convenient, or be contented to throw the weight of advantages into the scale of the latter. The native chief knows and profits to its fullest extent by the good faith of his European ally, who must wait patiently under every tergiversation and proud bearing of the former, until some positive act of aggression, or breach of the treaty, on his part, dissolves the contract. It is vain to suppose that a demi-barbarous nation, possessing the power to annoy, will refrain from using it when time shall serve. The inclination, at least, to do so accompanies power, as a shadow does the substance. The tendency to domination is inherent in the human mind, and the bias is closely linked with the instinct of self-preservation. International laws may control and stiffe, or suppress the propensity, but can never totally eradicate it,-just as particular codes of law apply to and restrain the other passions.

It has only been within the space of a few years, that the prominent Indo-Chinese nations have begun to evince some small share of respect towards the British. Had Ava, however, not experienced in some degree the severity of deserved infliction during the late war, our situation might have been widely different from what it now is ; our Indian neighbours would have, at the least, suspected that our power was yet vulnerable; the Siamese would have estranged themselves from those whose friendship would have been
then incompatible with their remaining at peace with Ava, and might have even menaced our straits and possessions. Had we been driven out of Burma, the British name would have instantly fallen, and much below par, in estimation, from the plains of Hindústan and the wide regions of the Indo-Chinese to China, and might have furnished subjects for the vehement vituperation of tea consumers and tea coteries in Europe.

While victory had not yet declared decidedly for our arms in Ava, the Siamese had entered into treaties with us; but, as before alluded to, they seemed by their subsequent conduct to consider such a measure as a sort of temporary safety-valve, which might be shut at pleasure. They, no doubt, bitterly regret now the lost opportunity of sharing in the ceded territory, a considerable portion of which was once their own.

Not having, therefore, gained anything directly by the war, a contingency they evidently did not anticipate when they condescended to treat, it is not reasonable that the British should expect concessions, political or commercial, from them as to a favoured nation. They must be viewed as a pcople who, aware of their own duplicity, are constantly on the alert to construe every movement of ours, however trivial, into an indication of hostile intentions. Every successive year almost, since 1822 , has been marked by alarms, real or pretended, on their side, and mcasures to counteract the effects of these alarms on our part. With such feelings of distrust, so foreign to those of true allies, working in the minds of the Siamese court and governors of provinces, it may, perhaps, hcreafter become the safest, and least involving, mode of procedure, to abstain from further very close federal alliances with them,-or, indeed, with any other Indo-Chinese state. Their fears would then be the best guarantee of the public peace, and would render them circumspect. Under any circumstances it cannot be expected that the proud court of Bankok, the "Seat of the Gods," as they term it, will swerve from its ancient councils, or be led to betray its own weakness by any unwonted concessions in favour of British trade and influence. A proud perversity of spirit will make it cling closer to ancient principles, and leave no field on which enlightened philanthropy or calm philosophy can labour with advantage, or policy calculate with any degree of certainty. Her commercc with China renders Siam less dependent on, or ambitious of, European traders than is generally supposed; and she will be more likely to concede commercial advantages to, or even to league with, a distant power, than to one already in contact with a long extent of her frontier.

The diminished influence of British merchants at the port of Siam will amply justify these remarks. If we must, therefore, have an extensive trade with it, one of two alternatives remains,-either to compel it to grant what is equally its interest to give as that of the British merchant to receive, or to gratify its self-love and ambition by mercantile, perhaps political, compliances which cannot be made without national discredit.

Siam would be equally exposed to punishment, whether that were to be called for by the infraction of a treaty, or by an aggression, where a treaty might not exist.

Ignorant as the Siamese affect to be, or really are, of the extent of British power, they are still a cautious and deliberative people: and in the main, and within their own circle of ideas, keen and penetrating politicians, rarely permitting the most deeply-rooted hatred, or an intemperate thirst of dominion, to betray them into precipitate measures. They may act on false principles, but they prepare well for what these may impel them to. Within their confined political horizon their understanding may be addressed; but both within it and beyond it, an appeal to their fears is likely to prove most advantageous. That they know what is morally right might fairly be inferred from a perusal of their national and naturalized literature, and from their religious and legislative codes. The examples and precepts, however, which these unfold or inculcate, may after all act but feebly on the current of society.

The repressed feelings of the court of Ava can hardly be misconstrued. That it received a wholesome check is true; but, as previously noticed, its institutions have not been impaired, nor have its population and resources been so far diminished, that they may not be restored to more than pristine vigour in a few years. The place of the old arms taken from them will soon also be supplied by new ones obtained from trading vessels. Both contending parties have been gainers, in fact, by the experience of two campaigns, the most discouraging, not to use a stronger term, that English and Sepoy troops were ever engaged in together. The British, headed by a general of uncommon perseverance, overcame the numerous difficulties of country and climate, in the face of an active enemy, more, perhaps, by their innate spirit and their moral energies, than by discipline as regards field movements; which last, in a jungle, is of little avail. They patiently endured privations, to which few regular armies in any country are subjected; and they carried with them, from the close of a triumphant contest, a knowledge of those roads, rivers, and channels, by which the pedestal of
the golden-feet may, on any future occasion of aggression from that quarter, be most expeditiously and surely assailed. The Burmans, on the other hand, were led on by a Bundúla ${ }^{2}$ of undisputed ability and activity, joined to a boldness which merited a milder fate than it was his lot to meet. The Burmans have not only felt-what was quite new to them-the stcel of a superior enemy, but have had the sense to profit by their experience; and could they but establish a nucleus of a regular army, by the aid of Europeans inimical to the British influence-an object at which they are, it seems, as before adverted to, now aiming-it were difficult to decide to what dangerous purposes the capabilities of such a people might not be applied.

The war, too, has forcibly elucidated that wise political maxim, not to despise an enemy, however contemptible or barbarous he may scem. It is instructive to read the older European accounts of Burman and Peguan wars, and the opinions of the writers, so unfavourable to the prowcss of these people, and to compare them with later realities. Had such vague descriptions of the Burmans, given by writers who could not have known their real strength, been fully credited by the British authorities, we might have entered into the war with a handful of men, instead of a well-organized army of thirty thousund troops, and should, consequently, have been defeated; and we should have learncd, when too late, that although very high, or even very stubborn, courage may be wanting in an enemy, yet, that nature may lend to his superior numbers her tangled shield of brakcs, rocks, hills, and waters, to level distinctions.

If the court of Ava should ever again throw down the gauntlet, we know to what points her forces will be directed. To regain her lost provinces in Arracan, Assam, and Tennasserim, will no doubt be a primary object; and were she to conduct the requisite preliminaries with that degree of secresy for which the Indo-Chinese are remarkable, our positions in the ceded territories might be attacked suddenly and simultaneously. The people of these territorics would be incited to rebellion; and the cupidity or fears, of the Siamese would be administered to as formerly, or excited, so as to induce their co-operation. The feelings of Indian states would, without fail, be probed, and China would be flattered by unusual marks of friendship, or by proffcred vassalage. It would then remain probably for the British authorities to decide at once, either

[^32]to abandon the conquered provinces, or to save them; and perhaps at the same time to operate a diversion of any meditated attack on the Bengal frontier, or on our Straits' possessions with Siamese aid, by carrying the war into the centre of Ava. The inconvenience and expense of a defensive system on such a crisis, at such a distance from our resources, would, in the long run, equal, if not exceed, that of an offensive one, and would certainly be less creditable to our arms.

Were the latter alternative to be adopted, a column might penetrate directly from Arracan towards the capital; another might occupy Rangoon; and parties could be sent by sea to seize on Bassein and Martaban, while Assam could be also provided for as circumstances might warrant.

To secure Pegu at once, it would be required to occupy a line across the country, the centre resting at the memorable post of Denobyú ; which last,"with Rangoon, would require to be sufficiently fortified to resist Burman attacks.

The Peguers, by this time, might be completely under our rulc; and as they could be assured of permanent emancipation from the Burman yoke, the whole energies of the population would be disposable for assisting in the war; and the revenue of the country would also be available. Supposing the Ava column to have reached that capital, it might, if permanent occupation of Ava should not be desirable, remain there until a heavy mulct should be collected, including a disarming of the population to such an extent as policy, guided by humanity, would dictate. It would now be only required to give the final blow to the ambition of this aspiring state; by causing it to give up all claims for ever, on Arracan, Assam, and Pegu, (the latter including Martaban and the Tennasserim coast). Thus it would be confined to its original form and ${ }^{\circ}$ boundaries, and would only be left at liberty to waste its energies, and to prosecute ambitious projects in the countries bordering on China and Siam. It would also then find it more difficult than hitherto to obtain supplies of fire-arms. A Consul at Ava, should such an officer be thought necessary, might watch, of course, the movements of the court; and the keys of the country being in our possession, and the navigation of the rivers of Pegu kept open by steamers, the golden Foot would soon, or, at least, his subjects would, find it best to submit quietly to the now order of things. Indeed, it would be difficult for the Burmans to exist without an intercourse with Pegu and Arracan; advanced as they are in civilization, and accustomed to foreign trade; and since it is from Pegu that they receive most of the salt and rice consumed in the country.

They would soon find it their interest then to encourage a trade with the ceded ports; and a more close intercoursc with Europeans might probably create in them wants which our manufactures could supply. The ancient line of Peguan princes being, if not nearly extinct, yet sunk in consequence, it would not be requisite perhaps to set up a chief of that nation in Pegu. By ruling Pegu as an Indian province, and with the aid of a strong Peguan policc, the safety of all parties would be best consulted, and the full revenue of that territory would be directly lcviable.

Should Siam aid the Burmans in the conflict, her numerous seaports, Bankok in particular, lie wide open for any summary infliction she might deserve. But should she prove an active ally, for bccoming which a certain degree of peculiar political training would be required, or a neutral power, in cither case it would remain to be considercd whether she might not be led to exchange possessions at the northern entrance of the Malacca straits, for some portion of the Tennasscrim coast. Thus Junkceylon, if given to us, would form an excellent connecting link betwixt our Burman and Straits' possessions; and the Malayan state of Keddah, if also ceded, might enablc the British to restore to its former Rájá his robbed singhasana ${ }^{1}$, and to place Siam almost beyond the pale of Straits' politics in time to come.

By possessing Junkccylon, we should control the coast, so as to check piracics, obtain rich tin-mines, and probably induce a little trade in that quarter. The people of that island, judging from the reception given to me there in 1824, and from their conversation then, have every wish to come under our sway. The focus of faction being removed so far off as Upper Ava, from the Tennasscrim coast, the provinces there might easily be retained, either by placing Pcguan or other native officers, not Burman, at their head, as mere collectors of revenue, aided by a native militia, or police, and a party of troops under a British officer, who might dispense justice to the people, and control the native collectors; or by a small British establishment of civil and military.

If any part of this coast were to be given up under such circumstances as have here bcen supposed, to the Siamese, Tavoy, perhaps, might be thought least objectionable, even although it yields most revenue. The Siamese would then be shut out from Pegu; where, owing to formor alliances, and to the number of soldiers of that nation in their army, they might be disposed to intrigue. It is

[^33]known that while the Burman war yet pended, they harboured a refugee scion of the Pegu royal stock, or a pretended one, with the intention of supporting his claims for their own advantage, had an opening occurred. Mergui, as a port for supplying and refitting ships, exceeds by far in value any other on the Tennasserim coast. That it wants population may be deemed an objection: but where property is under the safeguard of a British station, this defect will always in due time remedy itself.

If a little knowledge too frequently betraysits possessor into error, a little power is no less dangerous to the individual or to the many who wield it, when the means of increasing it lie within reach. But when the barrier has been leaped, and the first danger has been overcome, new principles come into play. Among the eastern nations, and particularly amongst the Chinese and Indo-Chinese, if you have the power, you will gain no credit ; perhaps be despised and insulted for neglecting, or refraining, from politic or humane motives, to use it ; and their pretensions will rise in proportion to your forbearance.

The British Government ${ }^{1}$ did not surely manifest any cupidity for territorial acquisitions after the contest with Ava; for adverting to what this war, so pertinaciously thrust upon us by the court of Ava, cost in men and treasure, much more valuable concessions might with justice, perhaps, have been exacted. A few years have been sufficient to prove that the British might even have retained Pegu, without having run the risk of being thought more ambitious than they now scem to be to the Indo-Chinese nations, who have been long tutored to consider no power as substantial, which does not affect and come home, in some shape, to each individually. Our deeds in Ava seem to them, and to the distant Malayan tribes, like the pageants of romance,-short and brilliant. They are dazzled by the strange light: but it is inadequate to dispel entirely the lurking suspicion, that the power which has (so magnanimously, ccrtainly) relinquished an empire within its grasp, is incapable of retaining it, or, as they would express themselves, that it resembles a torrent which ravages for a season the plain, but is unsustained by a copious fountain at its source. These sentiments are literally those which have been gathered from natives of several of the countries alluded to, and not theories of my own.

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 CAPTAIN LOW'S HISTORY OF TENNASSERIM.It is surely time that Britain should not mistake, or wish others to miseonstrue, the footing on whieh her eastern empire rests. No one with a sound pereeption of the past can well dispute that it must be kept by the sword which took it; and that, however we may plume ourselves on the influence of the benefieent institutions, the temperate freedem, purity of justice, and the exemption from the inflictions of war and bigotry, which have aeerued or been granted to our eastern subjects; and however calculated these may be to hand down on the enduring tablet of the human mind to future times, our moral and political greatness; yet that there will always exist in the breasts of the dispossessed Ishmaelites, and of the influential prinees and their subjeets, a smothered spirit, jealous and repulsive of our power.

The glorious administration of the Marquis of Hastings dispelled the mirage whieh had so long dimmed the politieal horizon of India. His master mind led him to spring a mine in the enemy's strong holds before the latter eould mature his plans: and the subsequent events showed that extension was then the best safeguard of our power; when conducted with a tempered judgment, and prosecuted by unceasing aetivity. Extension is certainly a term of vague import: but as applicable to India, it must be supposed to have a limit; and there are eireumstances in the geographical features of this portion of the globe, and in the moral and physieal aspect of several of its nations and tribes, which, to the refleeting mind of any one acquainted with them, will perhaps suggest a boundary beyond which, were it possible, it would be madness to advanee.

Towards this barrier, if it has not been already reached, an advance might indeed be fraught with ruin, were the means wanting by whieh the mighty Indian fabric of power has been built up and consolidated. But as such means are yet, and, it is to be hoped, will long continue, at hand, and are growing with our power, any advance which may be rendered imperious by the menaeing attitude of native states, will only serve to strengthen, on the principle that an enemy is safer at a distanee, than when thundering at our gates; that a defensive system is always encouraging to him, since he construes it into weakness ; and that to retreat is immeasurably more perilous than to advanee.

The history of nations will convince us that our Eastern Empire must have a termination; although eircumstances might perhaps warrant our throwing that period far on into futurity. However contented we may be with what we already possess, and however anxious we may feel to maintain our ground, neeessity may yet eompel us to proceed, lest the tide of fate should turn before we have
completed the mighty march. When a flood has been by any catastrophe suddenly checked, or has exhausted itself, and the accumulated waters begin to roll back, every puny rivulet hastens with the utmost vigour to accelerate the retrogression.

With regard to the Indo-Chinese regions, extensive territorial acquisitions in their interior may never be of importance to Britain, situated as she now is. They are poor, compared with Indian countries, and in comparison also with them, are scantily peopled; and their kings, and chiefs, and their subjects, cannot be moulded, ordered, or guided, by those maxims of policy best fitted for India. If any of these nations insult us, they can be taught their proper distance ; and should they proceed to such extremities, as to provoke us to occupy any of their trading sea-ports, thesc will, if it should be desired, naturally connect themselves with those mercantile zones, with which the enterprise of the British nation has already nearly girded the world; and which add elasticity and stability to our power.

## Lower Siam-Ligor.

The State of Ligor is one which chiefly obtrudes itself on the British Government with reference to its possessions in the Straits of Malacca.

Although much dilapidated, the town exhibits traces of its former flourishing state. It is dcfended by a vcry ruinous brick fortification, of an oblong shape, about 700 yards long, by 250 or 300 broad, the wall of which where uninjured is from twelve to twenty feet high. Loubère relates, that a governor of that province would not allow a French engineer (who had been sent by the King of Siam to survey it) to walk round the fort in less time than three days,-a silly species of parade not unfrequently practised by IndoChinese princes to enhance the fame of their cities.

The principal part of the town lies within the fortification; the access to which is across a wet ditch on the north, and a dry one, or partly so, on the south. A small river, of the same name as the town, protects it on the north-west. The only buildings of any note are the temples, several of which are handsome; and the two termed Plíhan Lo-ang and Wat Pradim are venerated above the rest on account of their age. This cannot, however, be great, as the superstructure is chiefly composed of wood. There are many others scattered over the country.

This region is neither well peopled nor cultivated. The number
of its inhabitants cannot be rated at upwards of 20,000 souls ; but, with the provinces of Sangora, Trang, and Dalung, the total Siamese subjects of the Ligorean may be taken at 70,000 souls.

The situation of its Phraya or Governor has been hereditary, when not subverted by faction or mal-administration ; it depends, however, entirely on the capacity of the successor-apparent whether his claim shall be admitted by the court of Siam or otherwise, and it is plain, from all that has passed within the last few years, that the power of the Phraya is checked, and, when neccssary, suspended, or rendered nugatory, by a council of several chiefs appointed by the Emperor of Siam to reside at Ligor.

Whatever the actual power may be, which the Siamese court has hitherto delegated to the Phraya, it is evident from his whole proceedings, since 1822 , that no curb was put on his ambition, and that his enterprising disposition was flattered and encouraged by the emperor.

The invasion and subsequent occupation of Keddah by the Siamese, in the year 1822, under the command of the Pliraya, joined to the subsequent intrigues of that chief with disaffected individuals in the smaller state of Perak, leave no room to doubt the strong desire which prevailed in the court of Siam to extend its power over the whole peninsula of Malacca ${ }^{1}$. Circumstanced, therefore, as the British possessions are on that peninsula, it becomes an object of some importance to ascertain the real strength and resources of the Siamese generally, and particularly of the Phraya, and the degree of suspicion with which the latter ought to be vicwed. The former subject has been already discusscd; and, before endeavouring to discuss the latter, it may be proper to advert to the claims which the Siamese thrust forward to the sovereignty, not only of Kcddah, and, par consequence, of the British scttlement of Penang, and of Perak ${ }^{2}$, but of the whole peninsula down to Malacca inclusive; and which, although they may allow them to lie dormant fur a season, will be resumed on some future and fitting occasion. It would appear that the Siamese had, on scveral occasions, overrun these countries, but that they had at length been contented to reccive mere acknowledgements of respect from their several princes, under the denominations generally of Dák Mai ngun Tháng, meaning "gold and silver flowers."

[^35]Perak is perhaps the last of the states alluded to which yielded this unwilling acknowledgement of inferiority; and as it only happened two or three years ago, it was, we may suppose, the necessary consequence of the termination of Dutch influence in that quarter. Keddah was apparently one of the first peninsular rajáships which was driven to the necessity of thus simply owning the supremacy of Siam. It would seem that the first regular presentation by her rájás" of the Búnga Amas,' or "golden flower," took place about one hundred years ago. Since then she has made several ineffectual efforts to get rid of the obligation; and it has bcen partly owing to an attempt of this kind, and partly to misunderstandings on other subjects, that the Phraya, or governor, of Ligor considcred himself justified in expelling the rájá from his country.

The Siamese cannot produce any proof that Keddah (with which country the British had, until 1822, been connected by treaty, and by mutual relations of amity) was ever considered as forming an intrinsic part of their empire; nor was it cven subject to Ligor at the period when that country was conqucred by Thaithang, a king of Siam, as appears from the List of Tributaries contained in the Ligor History,-a translation of which has been made by me, and from which an extract will appear further on.

It is true that the original inhabitants of Keddah, or at least those existing immediately antecedent to the invasion by a colony from Acheen, six hundred years ago, were of the Thai, or Siamese race, which perhaps spread from Ligor or Patani after the settling of the colony under Thammasakkarat ${ }^{1}$, the reputcd founder of the Ligor state, and also that the present ex-rájá of Keddah traces his descent from a line of independent princes of that racc. Siam was then but an infant state sent forth from the nursery of Laos; and other small partics of the Laos may have branched off in different directions, founding colonies where they settled. It was not until long afterwards, that, feeling her strength to increasc, Siam cast her eyes on the provinces now called Lower Siam, and on Tannau, and the coast south of Junkceylon inclusive.

It would be difficult to point out the country termed Awadr, whence the colony alluded to emigrated; if, indeed, much of the account regarding it is not fabulous. But as the journey occupied more than seven months, we may suppose it to have been either the

[^36]territory of the Laos, or some other one where that people had established themselves. It is also probable that it arrived from the quarter of Pcgu. Had the colony passed through Siam, its march must have been known to the people, and could not have cscaped being recorded; whereas it should seem that the fame of the prosperity of the new city was the first intimation which they had of its existence.

The fact of the inlabitants of Keddah, therefore, having derived their origin from Ligor, is by no means necessarily connected with any claim which the court of Siam may choose to found on their being of the same race with themselves. Besides, the character of that population has been perfectly altered by an intermixture with the various tribes of Malays, which have at different periods settled in the country.

Prescription might be allowed, perhaps, to have given to that court a loose title to ask a token of respect from the raja of Keddah. But since this mark of his weakness was exacted at first by force of arms, it must have been a sense of inferiority and of inability to assert his rights only, which could have excused a chief so situated bcaring with patience the degradation. Nor can the court of Siam, after having punished his supposed contumacy, exhibit to the world any just right permanently to occupy his country. As well may China assume the direct sovereignty of Cochinchina, and several other Indo-Chinese states, because she receives from them periodical offerings as marks of her long-acknowlcdged superiority as a nation over all of them ${ }^{1}$.

It would appear, that for the space of four hundred years subsequent to the conversion of the people of Keddah to Muhammedanism, i.e., about five hundred years ago, its rájás paid little regard to Siam ; and a passage is here produced from the Siamese History of Ligor, in which all the tributarics are mentioned, but amongst which Keddah is not to be found. In this History it is related that, after the construction of Pagodas there by ambassadors, from the Kingdom of Hongsawady, or Pegu, (which must have been antecedent to Burman influence in Pegu,) and in the fifth Siamese month, (or beginning of the year,) all the princes of the petty states tributary to Thammasakkarat, Prince of Ligor, (or Lakhán,) came either voluntarily or on compulsion to Ligor to perform the ceremony of

[^37]bathing the king,-such being the usual token of their homage. [The actual ceremony was not performed. The chiefs only presented golden or other vessels filled with water.] The tributary states were :-

On the East Coast,

1. Kalentan
2. Sanga
3. Theppha
4. Tha Thang
5. Taní [or Patany]
6. Náng Chík Chana-dí
7. Songkhla (Sangora)
8. Chaiya, and
9. Patthalúng.

An intelligent Búddhist priest informed me, that Junkceylon was once under the dominion of the Javanese; but Nai Ka, Lord of Ligor, attacked and subjugated it on Wednesday in the twelfth month of the 1916 th year of the Búddhist period, or A. D. 1373. The island was then termed Mú-ung Súnnakhanaam, or the Dog General's Country, alluding to the name or title of a general whose fame was perpetuated by a statue of a dog erected on the island to commemorate his successes.

But, were her titles to the sovereignty of the whole peninsula clearly defined and indefeasible, yet would her ruthless measures in war render a generous nation averse to witness [unmoved, humanity and reason outraged, without being permitted to use the means at hand to restrain the offenders.

The Ligorian army, which took Keddah, was an apt sample of a reckless horde of barbarians. Fire and the axe followed their desolating track; and while their swords were stained in the blood of an unprepared and flying population, the fields were laid waste, and fruit-trees cut down in wantonness, or, as a Malay expressed himself to me, the broom of destruction swept over the face of the country.

The unfortunate rajá fled on an elephant, leaving the greatest part of his family behind him ; and he was so closely pursued, that he was forced to throw most of his treasure into a river, and to scatter money on the road as he proceeded, to delay his pursucrs. It is true that the rája's country was unexpectedly attacked, and that his subjects were unprepared for resistance; but it is not at all certain that they would have successfully defended themselves, even
had they been aware of the danger: for it would seem that the Malays of Keddah are inferior in courage and enterprize to their brethren further down the Straits, and it wonld also appear that the rájá had, by a system of finance, which threw his subjects under the Chinese revenue-renters, and also by an unlimited and harsh exercise of his power, contributed to render himself rather unpopular at the timc. He had, besides, never chosen to keep, as his brother kings in the Straits generally do, a sufficiently strong band of regular troops in pay.

Flushed with victory, the Ligor Phraya ventured even to menace the British settlement of Penang, and insolently to demand that the Rájá of Keddah, who had sought protection there, should be forthwith given up to him. Some of his troops also had the boldness to cross the Muda river (the British boundary), and pillage the villages within the British tcrritory,-a positive act of aggression, and not to be attributed to ignorance.

The native population of Penang was thereby thrown into a condition bordering on distraction, while their fears were industriously fomented by a few Chinese who were favourably disposed to the Siamese. Under such circumstances danger was more to be apprehended from within than from anything which the Ligorian could do from without. The Siamese only blustered, however, and returned to Keddah, where they fixed their head-quarters, and have since fairly settled.

From a written Siamese account of the proccedings in Keddah at that period, it would appear that the rajá was in the habit of occasionally supplying rice at the usual rate of payment for the Siamese troops, and that he had refused to give any on a particular occasion, besides withholding the biennial, sometimes triennial, presentation of a golden flower. But it is further stated, that, upon the death of the last Phraya of Ligor, a prince of the royal blood of Siam went to that province to grace by his presence the funeral obsequies of the deceascd. Thosc chiefs of the peninsula who had been too weak hitherto to resist the demand for periodical presentations of golden flowers, werc speedily summoned to attend. The Phraya Srai, or Rájá of Keddah, was informed that he was expected to wait in person, (although such a mark of vassalage seems never to have becu exacted anterior to this period).

The chiefs alluded to " either attended personally, or sent substitutes or commissioners to the presence of the prince. But the Phraya Srai neither performed, nor sent any one in his place to perform this required act of homage. When the Phraya Thai, or King
of Siam, was informed of the disrespect shown by the Phraya Srai towards him, he directed the new Governor of Ligor to seize the first favourable occasion to humble the Kcddah Raya." The Phraya of Ligor accordingly invaded, some years afterwards, and took Keddah, as related.

This Phraya is the son of the famous $P$, $h r i a \operatorname{Tak}$, a Chinese who usurped the throne of Siam about fifty-six years ago, immediately after the departure from that country of the Burmans, who had invaded it, and carried off the royal family. The prince's mother was a Chinese. Tak was treacherously murdered by two generals who aspired to restore the original dynasty. His wife was saved, and sent as a present to the then Phraya of Ligor. She brought forth a son a few months afterwards, who is the present P,hría. It is probable that the Siamese Court did not attach much blame to Tak for his preferring a crown to his profession of a merchant, especially as the captivity of the royal family had left the government without a head.

The Phraya, or Governor, has therefore no illustrious ancestry to boast of, although he chooses to assume the titles appertaining to the original Ligor dynasty. His letters addressed to me, while envoy to his court, began thus:-" Phra ná hoa Chau Than chau P,hría Nak'hán Sí T,hammaraat Pho prasut;" which may be rendered, "The illustrious Head--the Lord and Chief of exalted degree-the princely Lord of Nakhan (or Ligor)-the noble T,hammaraat (the name of the first independent prince of Ligor), whose mind is dignified and princely."

It is not intended here to discuss minutely the question regarding the expediency or otherwise of the British neutrality observed on the above occasion. The attack by the Siamese troops on Keddah was so unexpected and sudden, that no time was allowed for a reference to the supreme British authority, by the local government of Prince of Wales' Island. The evil was accomplished; and to have remedied it by force of arms, the only mode left, must necessarily have led to a war with Siam, or, at the least, with the Ligor chief. It will be sufficient to observe, that conduct such as that displayed by the Siamese towards the local government, would, under any supposition but that of their being an ignorant and half-civilized race, have merited due punishment.

The conquest of Keddah is to be regretted on many grounds. All free trade with its port is nearly wasted away : supplies from it of grain, cattle, and poultry, for Penang, depend generally on the temper which the Ligorean may happen to be in; and the avenues
to the tin-mines are blocked up. The remaining inhabitants of Keddah are cruelly oppressed, and carried into slavery; agriculture and trade are neglected by them : and the British have only got a narrow river betwixt them and the Siamcse territory, which favours the escape of eriminals from justiee.

All trade across the Peninsula, excepting in cattle, has becn laid under restrietions equivalent to an abolition; for, it is plain, that however formally they may make a show of permitting a free trading intercourse with the Honourable Company's territory, yet they have the means of rendering such license null, without detection : and as to their allowing, or pretending to allow, Asiatics, not descended from Europcans, to eross it for trade, it is no boon to the British; since it is believed that the former class were never debarred the privilcge.

A general disorganization amongst the native ehiefs of the interior, down to Salengore, also tock place at the period of the invasion, and for several years subsequent to it. But the embassies sent to Perak by the Penang government happily gave a cheek to its further progress, and seeured the independence of the Malayan states. ${ }^{1}$

It was a fortunate thing for the oppressed people of Keddah, Patani, and other provinces, that the Penang government, then under the Hon. Mr. Phillips, who took a lively interest in the prosperity of the place, thought it expedient to settle the territory opposite to the island on the main-land, which had long been ceded to the British by a former Rájá of Keddah.

This territory, termed Wellesley Province, extends nearly thirty miles in a north and south direetion, with a brcadth of about three miles. Many advantages have accrued from the possession of it, independent of the supplies of grain, cattlc, and poultry, it yiclds to Penang. The Siamese have been precluded from approaching by land too close to the island, and from having an easy access to the countries to the southward. The piratical bands, which formerly found secure retreats in its creeks and rivers, have not molested the native traders in the degrec and manner they formerly did; and it offers a sure market to the people of the interior, who could not otherwise have brought down their tin, and other produce, the cattle and poultry, \&c., without risk. If any political arrangement should ever restore the Rájá of Keddah to his rightful possessions, the free and full control over the navigation of the rivers Muda and Krean would be gaincd to us, by means of which the produce of

[^38]many valuable tin-mines might be secured for the trade of Penang; and a commercial communication opened across the Peninsula to Patani, and other ports. ${ }^{1}$ This province might then (as it ought to have been at first) be bounded by the hills which are its natural frontier on the E., and be sustained by the two outflanking frontiers of Keddah and Perak, whose safety would then depend on us. This extension on the east, would confine the Siamese to the east side of the great range of hills, and remove them altogether from Straits politics. But the Siamese are as deeply interested in retaining Keddah, and controlling the Perak state, as the British can be that they should remove to a distance; since these two would be admirable positions for depôts, to enable them to carry their ambitious schemes into execution.

The total census of this province exhibits a fixed population of 25,043 souls. In this number there are 22,300 Malays, and 1,590 Chinese, and the rest is made up of people from Hindústan, Siam, and other neighbouring regions. The males in the whole population exceed the females by 1,772 , which may be accounted for by the number of persons who have fled from Keddah and Siam, leaving their families behind ; and also from the comparative small number of Chinese who are married. There are, as nearly as can be known, betwixt the ages of fifteen and fifty years, 11,795; above fifty years, 3,781 ; below fifteen years, 9,467 . Births during the year amount, by the census, to 162 , or 154 th part of the population; and the deaths were 128; the greatest part of the sufferers being children by the small-pox. Both these numbers appear small, compared with the population; but it is believed they are near the truth. ${ }^{2}$

The agricultural and proprietary class, of both scxes, consists of about 18,000 souls. The other inhabitants are engaged in petty trade, and in various other employments.

There are, in the whole population, 600 male and 500 female debtors, (termed orang berhutang,) or persons who have sold their services for a specific or unlimited time, always reserving the power

[^39]of freeing themselves by payment of the original debt, and what may have been afterwards added to it. They are a very indolent and fickle class of people.

There are now several large villages and bazars in the province. The increase of the population during the ycar 1829, may be stated at 1,860 souls. The births exceed the deaths only by thirty-four. So that immigration has chiefly caused the above increase. Additions are constantly being made in this way, from Keddah.

If the ratio of increase were to be calculated according to the births, and these did not exceed greatly what they were last year, it would require a long series of years to double the population. Yet the nature of the bulk of the people is such as to induce the supposition, that the ratio of multiplication will be rapidly increased, particularly should the vaccine inoculation prove successful. Unfortunately, it did not succeed on several occasions, and the consequence was a great mortality by the small-pox.

At present, there are about 288 souls for every square mile. But it can be shown that where rice will grow well, and yield fair crops, one square mile is capable of supporting 2,900 souls. So that there is abundant room for a much larger population than now exists.

The present rice-produce exceeds the consumption of the province by about 250 koyans ( $5,323 \mathrm{lbs}$. English), although the cultivators of rice compose only a little more than two-thirds of the whole population. But there are many holders of dry land yielding various descriptions of produce. Perhaps the province exhibits as busy a scene as may be found in any Malayan country of similar extent. When the labour of the fields is over, the ryot turns fisher, or wood-cutter, or petty trader. The island of Penang is almost wholly supplied too from this coast, with cattle, for draught and slaughter, and with poultry, \&c.

The annual value of every description of produce, according to an estimate made by me, from minute returns, may be thus rated:

| Rice, 2000 koyans, at seventy dollars per koyan | $\begin{aligned} & S_{\text {recie Dollars. }} \\ & 140,000 \end{aligned}$ |
| :---: | :---: |
| Orchards-dry cultivation; including some pepper and sirih | 73,000 |
| Ratans-dragon's blood, dammer oil | 1,000 |
| Sugar-cane and sugar | 70,000 |
| Cattle and poultry | 28,000 |
| Trifling manufactures, viz., cloth, leather, lime, bricks, chareo | 10,000 |
| Fisheries, and turtles' eggs | 5,000 |
| Roofing-materials, and wood and fire-wood | 72,000 |
| Milk, lutter, and other smaller supplies, indigo and tobacco | 10,000 |

It would be difficult, at present, to specify the real value of fixed property. Land fit for cultivation is worth, to the proprietor who farms on his own account, about 3 l . 12s. the English acre; and, calculating on the rental merely, its market-price is somewhat more than four years' purchase, although it yields about, twenty per cent. on the capital. Dry land varies in value according to its quality and situation, from a rupee to twenty dollars, and it only yields rent in some favoured situations, and where the soil is rich, and adapted for the growth of sugar, betel-leaf, and other valuable produce.

But it would be very forcign to this work, were the subject of Malayan Agriculture to be discussed in it at large, or the yet more interesting one of the cultivation of produce for the home market.

The following may be about an average of the value of property of every description :

|  |  | Specie Dollars |
| :---: | :---: | :---: |
| Value of lands in cultivation |  | 199,000 |
| Value of fruit-bearing trees, agreeably to returns from | districts | 179,200 |
| Value of buffaloes, black cattle, and other live stock |  | 15,000 |
| Agricultural stock (dead) |  | 11,000 |
| Boats 13,560, and fishing-stakes 400 |  | 13,960 |
| Native houses and granaries 18,000 |  | 67,000 |
| Government buildings, and government officers' houses |  | 2,900 |
| Total |  | 488,060 |

The uncleared land amounts to about 28,283 orlongs, or about 37,710 acres English.

The military resources which the government of Ligor possesses, are by no means formidable, even when placed in opposition to the comparatively very limited number of troops which garrison the British settlements to the eastward. It is not believed that the Phraya, or Governor, could collect above ten thousand fighting-men of all descriptions, about one-third part only of which he can afford to supply with decent arms; or that such a militia, hastily assembled -badly organized-without a proper degree of discipline-deficient in zeal, and personally uninterested, owing to the oppression they suffer, in the issue of their master's schemes, would openly ever be able ${ }^{\text {a }}$ seriously to annoy the British ; who by that exhibition of strength which is perfectly consistent with, if not essential to, a defensive policy in the East, would ever be prepared for events as they should arise.

The Siamese prefer expeditions in boats to long marches. But it is a singular fact, which has been before adverted to in this work, and which did not pass unobserved by Loubere, that they are bad
navigators, and totally disinclined to voyages out of sight of land. The fact is singular, because applicable to a people who, from inhabiting a very extensive tract of sea-coast, have every inducement such a circumstance can afford to maritime enterprise.

Their war prahus contain from fifty to 100 men. They are not always decked-thcir small artillery is rarely manageable; and the whole equipment, except in a few used for show, is very paltry. Their war-boats, and those of the Burmans, are nearly alike; and we have seen how a gun-boat at Rangoon could disperse a fleet of them, and destroy part.

The Siamese land and sea services, are not materially distinct from each other. The subject becomes whatever his master desires, from a serf in the field to a labourer on public works, or a soldier or sailor in war. They are dexterous rowers, and scem to prefer conveyance by boats to any other. These boats, however, are well enough calculated for making a sudden descent on an unguarded coast; and it requires but a few months for the building of several hundreds.

Were the Siamese crer to become so blind to their own interests, and so fool-hardy as to meditate hostility towards the British settlements in the Malacca Straits, their first object would be, to prepare a large fleet of boats, for an attack on Penang, in their ports of Keddah, Trang, Junkecylon, and Phúnga, a measure which they have frequently adopted for other purposes. It is difficult to suppose that any co-operation from Siam by sea could be effected, if our cruizers were vigilant, since the middle of the Straits of Malacca is, in a great degrec, under British control, and as the numerous pirates lurking on the coasts would prevent Siamese prahus easily passing close along them.

Such uncommon preparations as would be requisite to fit out fleets of boats in the ports alluded to could not be kept secret, and, if it were deemed nccessary, could speedily be frustrated. But were a fleet of such boats to reach the island, a gun-brig or two would perhaps be equal to the task of compelling them to retreat. If it were even to be supposed that an army from Siam Proper was to join the Ligorean, and march across the Peninsula, the leaders would probably proceed to Wellesley Province, with the greatest part of their force, and there await the fleet which should convey the remainder. An army so situated would be liable to be beaten in detail, in an open country. For, admitting that by numbers it got a footing in that tcrritory, it would be compelled to remain inactive, unless the fleet could reach it: and this might be prevented by
blocking up the above-mentioned ports. Two regiments, at the utmost, with the usual detachment of artillery, and supported by a fcw gun-boats, might in the Straits defy the whole Siamese nation. But Siam, unless indeed they leagued with the Malays, a very improbable case, is too vulnerable by sea to the British, and by land to the Burmans, Laos, Cochinchinese, and Cambojans, to admit of her detaching a large army so far to the southward. Two British frigates and a steamer, with complements of troops, would be sufficient perhaps, not only to carry the boasted "Seats of the Gods," but to destroy all their ports, and to suspend or annihilate their trade.

There is a strong analogy between the Burman and Siamese mode of governing. But in the details, it should seem that a firmer chain of responsibility has been wrought throughout the body politic in Siam than in Ava.

It is their unity of purpose alone, which has enabled the Siamese, with inferior numbers in the field, to overawe several Malayan states. It is in vain to indulge in the hope that the Malayan petty states will ever firmly unite to resist Siamese aggression. ©These have never, even in their best period, been united-have never constituted a nation. The original Malayan government was apparently confined to Sumatra, and was strongest about the ninth century: but many petty chieftainships have since risen on its ruins.

Malacca was established in A. D. 572 . But with reference to the petty states bordering on the east shore of the Straits of Malacca, they all naturally look for protection to the British. The fear of our interference alone, checks the advance of the Siamcse upon them. Yet with such an asylum from ruin, these petty states secretly or openly protect and abet the pirates, who systematically prey on the native trader, and who dare even to attack small vessels bearing the British flag, and to commit depredations and murders within sight of the British ports.

On the west side of the Straits are several petty chiefs, who own no superior, unless when forced to do so. They naturally fall under the dominion of the Dutch, if we are to admit that any treaty betwixt two European powers can transfer to either the right to control these chiefs.

But the Dutch and British are bound by a treaty to co-operate in expelling pirates from the Straits; and it is perfcctly consistent with the rights of nations, that the native chiefs, on both sides of these Straits, should be required, or even, if necessary, compelled to assist in finally suppressing them.

With respect to the states on the Peninsula, a temperate, but firm expostulation might have the desired cffect; and should that fail, other measures, warranted by a due regard for the rights of trade, and the public safety, could be ultimately resorted to.

It is not probable that the court of Bankok will relax her rigid rule over the provinces, Ligor and others, of Lower Siam, so as to give them the opportunity to throw off their allegiance. Controlled as each governor is, by a council of two oflicers of rank, it requires the most guarded conduct on their parts to retain their situations. Were they less under surveillance, and were Europeans allowed to trade more freely with the inhabitants of their respective districts, it is probable that they would assert independence. By intriguing with the Cochinchinese and Cambojans, and bribing the Malayan states bordering on his territory, and so as to keep them neutral, or to gain their assistance, the Phraya of Ligor might without much difficulty separate himself from Siam.
(To be continucd.)









 अथ₹वकीय पुण्येदयातूस माधिगताशेषपंचमहाशब्द्रमहासामंताधिपतितगरपुर परमेश्व रशीलाहारन रेंद जीमूतवाहनान्व
 कृतमहामंडलेग्वरश्री मन्क्न्नराजदेवनिजभुजोपार्जितानेकमंडल समेतंपुरीप्रमुखचतुर्दशगयामशतनसमन्वितंसमस्त कों कणयु वंसमनुशासति $\%$ तथैतद्राड्यनिंताभारमुद्धहर्मुस वीधिकारिश्रोनाग णेयसं $\begin{gathered}\text { धिविग्रहिकश्रीसिंहपेयकणाटकसंांधिविग्रहिक }\end{gathered}$ श्रीकपर्दिग्रीकरणादिपंचप्रधाने षुस₹सु थ अर्मिन्कालेप्रवर्तमानेसचमहामंडलेग्वर: श्रीमह्विन्नराजदेवःसवर्नेवस्वसंबध्यमान कानन्यानपिसमागामिराजपुत्रमंत्रिपुरो हितामात्यप्रधानाम्रधाननैयेगिकान् १ तथाराष्द्रपतिविषयपतिनगरपतिग्रामपति नियुक्तानियुन्तराजपुरषष जन पदांक्तथाहूय $\because$ ग्रामनगरपौर त्रिवर्गप्रभृती श्रप्रणनिपूजास₹कारसमादेशौःसंदिशः्यस्तुवःसंवि दितंयथा १ चलाविभूति:क्षणमंगियौवनंकृतांतदंतांतरवर्तिजीवितं १ संसार:सहजजरामरणसाधारणंशरीरकंपवनचलित



 वुडामणयेकम लिनीकामुकायभगवतेसविन्चेनानाविधकुसम श्लाघ्यमधर्य दत्वासकल भुरामु रगुरंज्रेलोक्यर्वामिनंभगवंतमु माप तिमभ्यर्च $\cap$ यजनयाज नाध्यय नाध्यापनादिषट् कर्मनिरतायत्रतुनियाकांउशौडाय पराश रगोत्रायछंदो गशाखिने महा त्रालणायआामदेवेयायविप्रनोडमेयमुताय ती यनयाजनाधयनाध्यापनादिषटकर्मकरणायअागताभ्यागतानित्यनैमित्तिकसं

 पूर्वोत्तरोगोवणिमर्यदा एवंचतुराद्याटनोपलक्षितंस्वसीमापर्यतंसमस्तोत्पतिसंयुतां ११ अवाटभटप्रदेशंजनादेशम नासेयंउद का दिख्वर्गणनमस्यवृत्यापरमयाभत्याप्रतिपादितं $n$ तदर्यसान्वयबंधोर पियुंजतोभोजयतोवाकृषतःकष्यतोवानकेनापिपरिपं थनाकरणीया ॥ यतउत्तमेवंमहामुनिभिः ॥ बहुभिर्वशुधामुन्ताइएजभिःसगरादिभि: ॥ यन्ययस्ययदाभूपिस्तस्यतझ्यतदा फलं $\pi$ दत्वभूभिंभाविनःपार्थिवेंद्रान्भूयेमूयेयाचतेरामचंद्:ः सामान्योयंधर्मसेतुन्नृपाणांकालेकालेपालनीयोभवनि: \# इतिमहर्षिवचनान्यवधार्यस्वेर पिसमागामिभिर्भूपाले : पालनधर्मफललोभएवकरणीयः $\because$ नपुनस्तल्लेपन पाप कलंकागेस रेण

 धरां आ सविषायांकृमिर्भृत्वाकृमिभि:सहपचते श यथाचेतदेवंतथाशासनदातालेखकहस्तेनस्वमन्तमारोपयति ॥ यथामतंम ममहामंउलेख्व रश्रीक्किन्तराजदे वश्यमहामंउलेख्वरश्रीमद्जज्डदेवराजमूनोर्यदन्चशासने लिखितं ता लिखितंचैतन्मयाग्रीमद्राजा नुज्ञयाभांडागार सेनजोगपेयेनभांडागारमेनम हाकविश्रोनागलेयम्रातृमुतेनयदत्रोनाक्षरमधिकाक्षरंचातत्संर्वप्रमाणमिति $\pi$

ग्रोर्मवतु आ छ ता इ \#

# MR. WATHEN'S TRANSLATION OF THE PRECEDING INSCRIPTION. 

Iranslation of an Inscription on three Copper Plates found near Bhandáp Village in Salsette. Dated saka 948 (A. D. 1027.1)

## " Invocation."

1. May that Gananáyaka, ${ }^{2}$ by whose worship sovereigns obtain victory and renown in every enterprise! May that destroyer of what is evil, preserve you from calamities!!
2. May that Siva on whose head Jáhnaví ${ }^{3}$ shines, as the silver moon on the summit of the golden Meru, protect you !!
" DESCRIPTION OF THE RAJA'S FAMILY, AND ITS ORIGIN."
3. There was a son of Jimútakétu, ${ }^{4}$ most renowned in the three worlds, the ever compassionate Jimúta-Váhana, ${ }^{5}$ who, for another's good, considered his own body as grass, and saved Sankhachúra ${ }^{\circ}$ from Garuda. ${ }^{7}$
4. From his family ${ }^{8}$ arose King Kapardí, the frontal ornament of the Silaharáa ${ }^{9}$ race, the overwhelmer of his foes; from him Pulasakti, who shone as the orbit of the sun.
5. From that prince, his son Laghu Kapardi, ${ }^{10}$ from whose dread many princes gave up their kingdoms as water.
6. From him was born a son Sri-Vayutanna, a sole hero on the earth, one courageous in battle. His son was Sri-Jhanjha, farfamed, who [was affectionate] as a brother, the protector of cows, fire, and men : his form was most beautiful.

[^40]5. His son Vajara Déva then reigned, whose actions were most excellent, most astonishing, of wide-spread fame, the crestcd gem of the whole globe of this world. With the force of whose arms Rajya $\mathrm{Sri}^{1}$ (the fortune of kings) becoming delighted, hath, of her own accord, taken up her abode in his heart, as in that of Murari. ${ }^{2}$
6. (His son was Aparájita ${ }^{3}$ ) as Jayanta ${ }^{4}$ of Vritrari, ${ }^{5}$ as Shanmukha ${ }^{6}$ of Purari, ${ }^{7}$ the fortunate and virtuous.
7. In liberality as Karna, ${ }^{8}$ in truth as Yudhishthira, ${ }^{9}$ in glory as Martanda, ${ }^{10}$ as the rod of Yama ${ }^{11}$ to his enemies.
8. From him sprung Vajara-Déva, whose eldest brother was Késha ${ }^{12}$ Rájá-Déva; the son of this Vajara-Déva, Sri-Chhinna-Rájá-Déva, became lord of men; who, when a youth, increased the renown of the Silára race.

## " TITLES AND EPITHETS OF THIS DONOR," viz. :-

(Thus, from his own established virtue, the five great words have been acquired. The sovereign of all inferior rájás. The Tagarapura ${ }^{13}$ prince. A lord of men in the Silára ${ }^{14}$ family. This rájá on whom splendour is reflected by those of the Jimúta Váhana race. He whose standard is a golden eagle. ${ }^{15}$ "Sahajvidyadhar-Tyaga-Jaggat-Bhrama," the frontal ornament of inferior princes. A protector of those who seek asylum from the thunder of Indra. Lord of chieftains, ${ }^{16}$ Sri-mata-Chhinna-raj-Déva, who, by the force of his own arms, has acquired many different provinces ; ${ }^{17}$ with the city
${ }^{1}$ Lakshmi, wife of Vishnu, and goddess of good fortune, \&c.
${ }^{2}$ Vishnu, who killed Mura, a demon.
${ }^{3}$ The "Asiatic Researches" calls this prince Vajrapuujara; but both words are only epithets, perhaps.-H. H. W. ${ }^{\text {I Son of Indra. }}$
${ }^{5}$ Iudra, who killed the demon Vritara.
${ }^{6}$ Kartikya.
7 Mahadéva Siva, the foe of the demon Pura.
${ }^{8}$ An ancient rájá, and half-brother of the Pandus.
${ }^{9}$ Son of Pandu, or of Yama.
${ }^{10}$ The sun.
${ }^{11}$ The deity of Hell, corresponding with Pluto and Minos.
${ }^{12}$ Kési. The " Asiatic Rescarches" has Arikesári.-H. H. W.
${ }^{13}$ Lord of Tagarapura seems to be mercly a title claimed by the rájás of this family, as the capital is called Puri.

14 Siláhára (शीलाहार) also read (शीत्मार) Silara and (शिलयार).
This rather applies, I believe, to Jimúta Váhana than to the reigning prince.H. H. W.

15 The emblem of Garuda, who was the patron deity of the family.-See Note A.
${ }^{16}$ Mandalikéswara.
${ }^{17}$ Reigns over the whole Hither Konkan, with fourteen hundred villages, and its chief city; or it may be, of which Puri is the chief.-H. H. W.
of Puri ${ }^{1}$ the metropolis, and its fourteen hundred villages of the Konkana, such a region this prince governs.)

Thus, supporting the burden of thought concerning this domain -the prime minister, Srí Nagannyya ${ }^{2}$ the Sandhi Vigrahica, ${ }^{3}$ Sri Sinhpyya, the Karnataca Sandhi Vigrahica, ${ }^{4}$ Srí Kapardi, Srí Karna, \&c. These being the five Pradhanas (ministers of state), at such an auspicious period. This great Mandaléswara (prince) Srimata-Chhinna-Rájá-Déva, to all his own kinsmen, to others also, and to such Rajputras (princes) as may hereafter reign, to ministers, and priests, to the amatyas, pradhans and ex-pradhans, to those who are in employ, or out of employ.

And the like of these, Rashtrapatis, (governors of provinces,) to governors of districts, to chiefs of cities, heads of villages, both present and former, to such royal servants, and also to the countrypeople, addressing himself to these, and all others assembled, he exclaims, Be these unto you! reverence, worship and honour. We order and proclaim. Let these be well known unto you!!

## STANZA.

1. Wealth is unstable, youth vanisheth in a moment, man's life is as between the jaws of Kritánta. ${ }^{5}$ This life is a thing connected with decay and death. Age and wealth are uncertain as a drop of water sprinkled by the wind on a lotos-leaf. Considering this, charity appears to me to be productive of the most solid advantage. And thus:
2. Vyása hath said, \&c. [from the Purans.]

Thus remembering that the words of the ancient Munis, the skilful in drawing the distinction between what is religious and what is irreligious, ${ }^{6}$ also for the sake of my own benefit, and for that of my mother and father ; by me, years being expired of the king, Saka ${ }^{7}$ nine hundred and forty-eight, in numcrals 948 , in the year [of the cycle] callcd Kshya ${ }^{8}$ or Kartica Shud ${ }^{9}$ 15th, (or the day of the

[^41]full moon) being Sunday, on the great occasion of an eclipse of the sun, having bathed at a sacred place :

Having offered an Arghya (vessel) to Savita, ${ }^{2}$ the one Gem in the Circle of Heaven, who is longed for by the lotos-flowers ; having also worshipped the Lord ${ }^{3}$ of Uma, the holy one, the spiritual instructor of the Sura ${ }^{4}$ and Asura the ruler of the three worlds; to Amadevya the son of the Bramin Normyya, (a Brahmin of the Parásara tribe) a sacrificer, and one causing sacrifice to be performed, a reader of the Vedas, a teacher of them to others, a performer of the six (sacerdotal) duties, for the sake of acts done, and those still to be practised ; for those which constantly require to be kept up; on account of these, and for "Bali," (or offerings made to spirits, dogs, crows, \&c.) for the "Vaiswadéva," ${ }^{5}$-" Agnihotra," ${ }^{6}$ sacrifices and ritual; for the constant performance of all these, and for the maintenance of his own family ; is given, a field called Borni-Bhat, in the village of Naura, one of the sixty-six ${ }^{7}$ villages Shat Shashti of Srí Sthanaka; ${ }^{8}$ (Thanna;) the boundaries of which are to the east, Gouvani bound, to the south Gorapalwalli bound, to the west the Rajpatha, (or king's high road,) to the north-west, Gowani bound; thus defined by its bounds within its well-known limits, with the whole of its produce.

On which [field] the prince hath now no claims, on which the king's commands shall not take effect, which is improper ever to be made use of by the sovereign. Such field is therefore granted with water and gold, ${ }^{\circ}$ of our free will and pleasure: thercfore as long as this Amadévya, his lineal or collateral heirs, enjoy this, or cause it to be enjoyed, cultivate it, or cause it to be cultivated, no one shall offer them molestation or hinderance.

The Munis ${ }^{10}$ have also declared thus :
> " stanzas from the purans," ${ }^{11} \& \mathrm{c}$,
> 1. Rájá Sagara, \&c.
> 2. Ramchandra's bridge, \&c.

Know these to be the sayings of the divine Rishi ! ${ }^{12}$
${ }^{1}$ An oblation (and also the vessel holding it) to gods and saints, of rice; Durva, grass, flowers, \&c., with water. ${ }^{2}$ The sun.
${ }^{3}$ Siva. *Sura are good spirits, and Asura bad spirits.
${ }^{3}$ Offerings to all the deities. ${ }^{6}$ Worship of fire.
${ }^{7}$ The island of Salsette is from this still called Sashti, being a corruption of Shat Shashti. ${ }^{8}$ So Thanna was called.
${ }^{9}$ To constitute sucl grant a legal one, water must be poured by the donor into the donce's hand, and gold must be given.
${ }^{10}$ Holy saints. ${ }^{11}$ These have been often translated. ${ }^{18}$ Saints.

All future kings should be indulgent in confirming this grant. Let no one ever live to incur the sin of coveting this [land].

I, having thus supplicated and entreated; whoever, having the light of his mind destroyed by the darkness of ignorance, shall seize this [land], or shall assist in destroying this [grant], being guilty of the five greater, and the five lesser sins, will long inhabit the dark abodes of hell,-" Raurava," " Maha "raurava," "Andhatamisra," \&c. ${ }^{1}$

I, (the son of the Maha-Mandal-Eswara ${ }^{2}$,) 'Srí-mata-VajjaraDéva, Srí-mata-Chhinna-Rájá-Déva, am the granter of this Sasana (edict), cause my name to be inscribed by the writer, for whatever is written is binding on me.

This order of the great king is written by me, Srí-Bhanda-Agara-Senjogpyya, son of the brother of Nagalya, the "Maha"Kavi," or great poet (poet laureate).

Should there be a letter either more or less, still the whole [written] here is valid.

Be propitious !

Translated by W. H. Wathen.

## (Note A.)

The following is a short account of the fabulous history of the founder of this family. Jímútaketu, the father of Jímútawáhana, was a spirit (Vidyádhara), but by a curse he became a human being, and then a rájá. Once on a time, the eagle Garuda having made war on Vásuki, prince of the serpents in hell, made him agree to give him one of his subjects (serpents) daily for food, which was done. After some time it came to the lot of a serpent named Shankachíra to be sacrificed; he was accordingly taken to the appointed "sila," or rock, and left there for the eagle, but was observed by Jimútawáhana, who resolved to save him ; and on the serpent's ${ }^{3}$ going to bathe previous to his death, the rájá placed himself in his stead on the rock. Garuda having come, the rájá said he was the serpent, and requested him to devour him, which he accordingly did, his head only remaining. In the mean timc the rájás wife came to

[^42]
## 114 TRANSLATION OF ANCIENT INSCRIPTIONS.

the spot in search of her husband, and seeing the head, began to reproach Garuda for killing so holy a man. The serpent also returning began to reproach the prince of eagles, on which Garuda restored the rájá to life, and told him to ask for anything, that he might grant him a boon. Jímútawáhana then requested him to abstain from devouring the serpents of Pátála, ${ }^{1}$ which he engaged to do. The prince, from his generous conduct, obtained the name of "Siláhára," or, one who was devoured on the rock; this has since been corrupted into "Shilar," or "Sélar," and a caste of the name is still numerous in the Dekkan.

W. H. Wathen.

## LIST OF KINGS IN NO. III.

Jímútawáhana (of the Siláhára or Shilar race) of Shaiva sect.

1. Kapardi.
2. Pulasakti.
3. Laghukapardi. (?)
4. Vyutanna.
5. Jhanjha.
6. Vajjaradéva.
7. Aparájita.
8. Vajjaradéva II.
(9. Kesharajdéva. ${ }^{.}$)
9. Chhinnarajdéva, whose title was the Tagarapura Prince. His capital was a place called Puri, in the Konkan. ${ }^{3}$
[^43]Art.IV.-Translation of a Berber Manuscript, by W. B. Hodgson, Esq., M.R.A.S., late American Consul at Algiers.

The present narrative was composed, a few months ago, at Tangier, under my direction. It was written by the Taleb Sidi Ibrahim ben Muhammed, of the town of Messa, in the province of Sús. It was first written in the Berber language, and thence translated into Arabic, ${ }^{1}$ from which I made an English version.

The Berber language is spoken in North Africa, from the banks of the Nile to the Atlantic ocean. In the empire of Marocco, the aboriginal population has been divided into Shilluhs and Berbers, both of which, however, bear the generic appellation of $A m z i ̂ g h$, or free, and they both speak dialects of the same tongue. This language is called by them, Tamazight, which is their own name, Amzigh, with the feminine article $T$, prefixed and suffixed. It thus means the free language. The appellation Amzigh corresponds with that of Frank, of the Teutonic nations, and Slav of the more northern countries. The Greck and Latin historians seem to have corrupted $A m z i g h$, in to Mazích, Mazisci, Mazyes, and Mazyces.

The Berber language merits investigation, from its great antiquity, and its connexion with the geography and history of North Africa and Egypt. This dcsirable object can only be accomplished by the study of written examples. With this view the present narrative was composed. In addition to this advantage procured for philologic science, it affords that of some statistic and political information, regarding a remote province of Marocco which has rarely been visited by Europeans.

There are only three Berber manuscripts in existence, of which I have any knowledge. The first is a version of the Evangelists, made under my superintendence, and now in the possession of the British and Foreign Bible Society. The second is a book of religious faith and practice, written by the Marabút ben Naser, for the use of the natives of Wad Draa. The enterprising traveller, Mr. Davidson, now in Marocco, has promised his efforts to procure a copy of that book. The third manuscript is the present narrative of Sidi Ibrahim ben Muhammed.

London, March 1, 1835.

[^44]The Personal Narrative of the Taleb, Sidi Ibrahim ben Múhammed elMessi, of the province of Sus; including some Statistic and Political Notices of that extreme south-west country of Marocco.

The Taleb Sidi Ibrahim ben Muhammed el Messi, el Susi, says, [God prosper the town of Messa, on account of its men of the law! Amen !] that he was the younger son of his father in that place, and that he went to the mosques, to read the Korán under the instruction of a fakir. The name rof this fakír was Muhammed ben Muhammed, cl Messi, el Susi. He continued to study under him for the space of twelve years and a half. His father supplied his cxpenses, and gave him bread and kúskús every day.

Let us now turn to the description of Messa; it has seventeen villages, and a market in the centre of them. There is a quarter of the Jews, under the government of Shaikh Mubarck ben Wahman, and of Shaikh Ibrahim ben Sidi Muhammed Ben-jurmah. These are the Shaikhs who rcceive the tribute from them, which amounts to four dollars per month, for each house. If the feasts of the Mussulmans fall upon Saturday, the Sabbath of the Jews, every man, woman and child, must pay four ujuhs ( 25 cents) to the Shaikhs.

We will now speak of the troops of Messa, of which there are in number seventeen hundred. The number of women and children can only be numbered by God himself. There are in Messa, twelve hundred and fifty houses, and one hundred and eighty horses. These are used both for riding and ploughing. Oxen, mules and asses, are also used for ploughing. The horses are also employed in war, in attacking the enemy. In Messa therc are all sorts of trees that are known to man. The vine, fig, cactus opuntia, date, orange, lemon, apple, apricot, and plum; melons, water-melons, and olives, flourish herc. There is also abundance of honey and beer. Herds of cattle, and flocks of sheep, camels, mulcs and asses, abound in Messa.

The river ${ }^{1}$ passes through the middle of Messa, and falls into the sea. Jews and Mussulmans carry on an active commerce in this town.

The books dcpositcd in the mosques of Messa are so numerous, that no one knows how many there are, but God alone. There are a great many Talebs, and Hajjis, Sheriffs, and Marabúts, whose blessings, may God render availing for good! Amen!

We will now speak of the money which Messa pays to Sultan Mulai Abd-al-rachman, every year. This is the sum of five thousand

[^45]mitscals, ( 3333 dollars), which remained fixed until the year 1251, ${ }^{1}$ when the Sultan told the people of Messa that they must give him one thousand additional mitscals per annum. They replied to this requisition, that they would not give anything more than the five thousand mitscals, a negro slave, a negress, and one horse, which it had been an established custom to pay every year. The Kaid of Tarudant, Abd-al-sadik, who represents the Sultan, upon the arrival of this reply, sent fifty-five horsemen to Messa, and demanded the six thousand mitscals, the negro, negress, and six horses. They replied, "Go back to the Kaid who sent you, and tell him that we will not send him any part of the money which he has demanded." Upon this, the horsemen that had been sent to Messa returned to Tarudant, to the Kaid Abd-al-sadik. He said to them, "Tell me what passed between you and the people of Messa." They replied, "The day ond ${ }_{6}^{3}$ which we sent to them, they assembled at the house of the Shaikh, to hear us read the order which you gave us for them. They replied to us, ' Go back again, for we will give you nothing.' " On hearing this, the Kaid immediately sent to his friends, the Shaikhs who govern in the country of Stukha, which is near to Messa, to whom, when they had assembled, he said, "What shall we do with the people of Messa?"

The Shaikhs replied, "You must write to the Sultan who is in the city of Marocco, and request him in your letter to send you an army, to attack the people of Messa." The Sultan accordingly sent to his Lieutenant an army of three thousand five hundred cavalry, under the command of the Kaid Taib-eddin, who was in the service of the Sultan's Lieutenant at Tarudant. When the army of the Sultan reached that city, it remained there three days, and then proceeded to the interior of the country of Stukha. The Shaikh Taleb Muhammed el girani, said to the Kaid, "I and your deputy must go to the town of Messa, and hold a conference with the inhabitants." To this the Kaid consented. The Shaikhs mounted their horses and proceeded to the district of the tribe called Aith Hamed. This tribe inhabits the mountains between Messa and Idauliteit. The army encamped near the mountains, on the river Elgas, and the mountaineers descended and fought with them, during the space of three days, until the sheriffs and marabúts came to them, to make peace. Upon this, the mountaineers came and remained with the army one day. Fourteen of their chiefs were treacherously seized, and sent to the Kaid Abd-al-sadik at Tarudant. On the day of their arrival at Tarudant, they were all beheaded, and their heads

[^46]were hung up at the gates, and remained there till midnight, when one of them was heard by the people to read the Koran, until daybreak, and another cried the ezan to prayers.

The army which had encamped on the river Elgas proceeded to demand of the people of Messa that which had been previously required by the Kaid. It eneamped near Messa, on the night of the festival of Mouloud, ${ }^{1}$ and remained there during the seven days of the festival, during which time the six thousand five hundred mitscals were brought and delivered to the Shaikh'Hassan-weledDeleim, who went between the people of Messa and the Kaid. He said to them, "You must come and sit down, and talk with me." They replied, "We will not meet you, even should we be forced to leare this country entirely." This answer was given to him, and the people of Messa commenced the attack. The army mounted their horses, rushed against the houses of Messa, destroyed them, fired upon the people, and kept up the combat for half the day. The army was routed, their eannons were abandoned, and they lost many men, and seven hundred horses. They left their tents, only taking away seven, and an infinite number of arms. They were pursued to Stukha; and the people of Messa were aided only by those of Agelou and Teznit. The mortars and cannons which were taken were kept until the six thousand five hundred mitscals that had been paid were returned. This is what occurred between the people of Messa and the Sultan's Lieutenant who governs the whole country of Sús.

## SOME NOTICE OF THE DISTRICT OF TEZERWELT.

The Taleb Sidi Ibrahim ben Muhammed el Messi, el Susi, says, that he went to the monastery (Zawiah) of Tezerwelt, and studied there seventeen months, under the instructions of the Taleb Sidi Muhammed Ben Ajelli. He was a great saint. The number of talebs who studied at that Zawiah was seventy-four. Thirty-two of them read law, from the work of Sidi Halil, and the grammar of Elfieh ${ }^{2}$, and all other writers upon these subjects. The other talebs read the Korán. Their food was furnished by the Kaid alone, who governs that country. His name is Sidi Hisham. He gave to the Zawiah six women slaves, and the same number of men. These cook the food of the talebs. The number of villages belonging to

[^47]Tezerwelt is nine. The castle of Hisham is in the middle of the country, and the quarter of the Jews is to the left. The market is always held at the gate of the castle, or residence of Hisham. This building is of lime and bricks, and of planks and rafters, which are of pine. Tezerwelt is rich. The Caflas trade to Tombuctú, Sudan, the Sahara, and Agherdum, and buy the following articles : elephants' teeth, ostrich feathers, slaves, and gold dust. When the Cafia sets out on a trading expedition, it does not return until the beginning of the nexxt year, when it brings back a great deal of property, which they send to their friends, the merchants in Suira (Mogadore). From them they receive in return other goods, such as cloth, cotton, iron, steel, glass beads, coral, cloves, spikenard, delftware, glass, and whatever else comes from Christendom. On the arrival of the Cafila, all the merchants, Moors, Jcws, and Christians. assemble, and purchase the whole of their merchandise. This is the custom of Tezerwelt.

We will now speak of Hisham. He has twelve sons, and they all ride horses, of which they have thirty-five in number. Their herds of cattle, sheep, and camels, cannot be numbered but by God alone. Hisham has four white wives, and six women slaves. His eldest son has an equal number of white women, but a larger number of black ones, than his father. The horses which we have mentioned, are mounted by the sons of Hisham alone. The troops of Tezerwelt amount to fourteen hundred. These are cavalry, an " the horses of Hisham are not included.

The number of houses in Tezerwelt is seven hundred and fifty. There are one hundred and thirty books in the Zawiah, four of which are written in the language of the Amazigh, which means Shicha. These four books contain the words of Ben Naser, in the Shilha language.

We will now enumerate the fruit-trees which grow in this country:-fig, date, grape, walnut, almond, pomegranate, lemon, orange, apricot, plum, and whatever else are spoken of among men. The river called Tezerwelt passes through the middle of the town.

Sidi Hisham governs many districts, which we will here enumerate :

1. Endjad of tezleim ; 2. Aith wankes; 3. Adubouakel; 4. Girsunukt; 5. Maader ; 6. Wodjen ; 7. Aith Ibrahim ; 8. Aith abel; 9. Aith reha; 10. Ifran; 11. Idauliteit; 12. Adusemlel.

Over these tribes which we have enumerated, Sidi Hisham has exclusive jurisdiction. He cuts off heads and hands, and does whatever may be his pleasure.

The family of Sidi Hisham is Scmleli. Semleli is from Edris, and the family of Edris is deseended from Muhammed, the Prophet of God. Mulai Abd-al-rachman (the present Emperor) is of the Fileli branch (Tafilelt), through Edris to Muhammed, the Prophet of God, on whom be the peace and blessings of God! This is the difference of genealogy between Abd-al-rachman and Sidi Hisham, both of whom are deseended from Muhammed.

## TOMGRUT.

The Shaikh Hamed ben Muhammed ben Naser, on whom be the blessings of God! composed his book in the Shitha language, and ealled it the Book of the Amazigh. This book treats of those duties which are of positive preeept, and of the Sumnah. It treats of the duties of fasting, and instruets as to what is lawful and forbidden among men. It commands alms and tithes, and deseribes whatever is lawful and unlawful in the world, among Mussulmans, Jews, and Christians.

Sultan Mulai Abd-al-raehman gives to Sidi Abú Bekr (the son of Ben Naser) five thousand mitseals every year (3333 dollars). Sidi Abú Bekr remains at his Zawiah until the beginning of the year, when he leaves with his friends, and goes to Tarudant, the daughter of Syria, where he remains until the people of Sus colleet and bring to him the money which is due. This is fixed at one quintal ( 666 dollars) for every district. Shaikh ben Naser, the father, was a devout man, and great with God, who gave him wisdom, and power over spirits and men. May God render the blessings of his family profitable to us!

Mulai Abd-al-rachman is bound to send a present, at the eommencement of every year, to Sidi Hisham, of one thousand mitscals (666 dollars). Sidi Hisham sends to him in return a present, and one slave. Sultan Mulai Abd-al-rachman ealls this the present of Sidi Hisham's aneestor, Sidi Muhammed ben Musa. May God render the blessings of his Zawiah profitable to us !

## AGELLOU.

The Taleb Sidi Ibrahim ben Muhammed el Messi, el Susi, says, that he went to the town of Agellou, and there studied nine months, under the instruction of Taleb Sidi Muhammed ben Hussein el jerari. The number of talebs who were studying there was fifty-two. Fifteen of these talebs were reading seience (law), and the rest of them studied the Koran. The number of books in the Zawiah of Agellou was eighty-three. Of these, there was only one in the Amazigh lan-
guage. The maintenance of the talebs was derived from the people of Agellou, who appropriated to this object half of the tithes in wheat, barley, and dra, and other articles. These are collected and brought to the Zawiah. In the house of the mosque there reside four families, by order of the tribe, which prepare the food of the talebs. Every house gives to the Shaikh Ali ben Abdallah, fifteen Ukiahs in money (l dollar), with which he buys oil, butter, meat, soap, and other necessaries. This Shaikh instructs the talebs.

The number of villages belonging to Agellou is nineteen, and there are two Shaikhs, whose names are Ali ben Abdallah, and Abdallah ben Mubarek.

The district of Agellou furnishes three thousand two hundred and fifty troops, and nine hundred and sixty horses. There are two thousand two hundred houses, and an innumerable quantity of women and children. The town of Agcllou is on the sea-shore, and it has a port built with mortar and stone. The inhabitants have feluccas, with which they go out to sea, and fish. One day, there appeared a vessel in the distance, which approached, but the nishermen fled through fear. The vessel remained at sea until the middle of the night, when it entered the port and anchored. The next day a red flag was hoisted on the mast, and the vcssel remained fifteen days at anchor. The inhabitants of Agellou, great and small, assembled and kept watch night and day, as did also the horsemen. No one remained at home. The Shaikhs of Agellou, upon this, wrote to other districts, to inform them of the event, and they also wrote to Sidi Hisham, requesting him urgently to come to them. They informed him that the Christians had arrived, and taken their port. Sidi Hisham in consequence sent couriers to every part of his jurisdiction, and commanded the people to meet him at Agellou. The tribes which were near assembled at that place. On the day of his arrival, Sidi Hisham told the people to hoist the red flag, as the vessel had done. At the sight of this flag the sailors came ashore in their boat. Sidi Hisham then told the people that not one should speak a bad word to the Christians, until he had spoken to them, and understood their intentions. Hisham questioned the Christians, and asked what they wished at Agellou. They replied, "The first thing we ask, is security." Hisham replied, "God grant you safety from us." The Christians told him, that their object was to buy and sell; to which Hisham replied, "Very well."

After this, the Shaikhs of other districts beyond the jurisdiction of Hisham assembled, and had a conference in their divan. They said that Sidi Hisham's words with the Christians would not be
pleasing to Sultan Mulai Abd-al-rachman. Hisham replied to them, "I am responsible for those words to Abd-al-rachman." To this responsibility the Shaikhs assented, and had a paper drawn up to that effect, in presence of aduls (notaries).

Sidi Hisham then asked the Christians what they wished to buy. They said, " We wish to purchase oil, butter, wheat, oxen, sheep, and fowls." When the Mussulmans heard the words of the Christians, they collected the articles which we have mentioned, until they had an abundance. The Christians said to them, "Our vessel is full, we must now go and unload in our country, and we will come back to you." Hisham said to them, "That which I have done is against the wish of the inhabitants of Agellou; I have done it for God's sake, and for the sake of that peace which is betwixt us, and I have furnished you with whatever you wanted from our country. When you arrive in your country, you will buy for me fifty cannons and ten howitzers." The Christians promised to do this, and to return at the same period the next year. Hisham said, "Execute my wishes, and whatcver you may want in the land of Mussulmans, I will grant it to you."

This is the relation of the Taleb Sidi Ibrahim ben Muhammed el Messi, el Susi.

## THE TRIBE OF AITH AMRAN.

The year after this event, another vessel arrived, and anchored near a place called Efin, which belongs to the tribc of Aith Amran. The crew came ashore in a boat and talked to the people, and said, "We will buy from you bread, meat, water, and whatever else we may want from you." The Mussulmans then brought to them bread, and melons, figs, prickly-pears, and watcr, and said to the crew, "You must give us two of your number to remain on shore, and we will go off to the vessel with you," to which they assented. The two sailors were brought ashore, and the Christians then demanded one Mussulman, who was given to them to remain on board. The Mussulmans then loaded one boat and went off to the ressel, and delivered fresh provisions to the crew. They went on board and looked at everything in her, and then insisted upon some of the crew going with them to get water, which they did, and filled their casks. Only four men remained in the vessel, when fifteen Mussulmans went off to her in a felucca. The crew told them not to come on board, until their companions were come back. The Mussulmans replied, "We will come on board by force," and they did get on board, when the Christians fired upon them. The Mussulmans fought and
killed two of their number, and the other two they took ashore to their companions who were getting water. The Mussulmans then took the whole of them prisoners. The Mussulman sailors went off to the vessel in a felucca, and having raised the anchor, brought her to shore, by towing, and sold her for two hundred and eighty mitscals. The Christians were sold, and distributed among the tribes. Intelligence of them was sent from district to district, until it reached Suira (Mogadore). The merchants of that place immediately sent their friends with money to the country of Aith Amran, and told them to buy those Christians, not one of whom was to remain behind. Any price they were to give, great or small. The friends of the merchants were Mussulmans, and they proceeded to Aith Amran, and presented themselves to the Shaikh who governs the tribc. They made the aar, and said to the Shaikh, "Our wish is that you would stand with us in purchasing the Christians who were captured here by Mussulmans." He replied, that he would do so, and that they were welcome. He in consequence sent to the Mussulmans who owned the Christians, and collected them together. Seven were brought to the Shaikh; three remained, two of whom were in the country of Aith Abu Bekr, in the possession of the Shaikh, whose name was Shaikh Abdallah ben Abui Bekr; and the third Christian, a boy, was in the hands of the Shaikh of the tribe of Agellou. He said that he would not sell the boy, who was as dear to him as one of his own sons.

Shaikh Abdallah said to the boy, "You must turn to the religion of the Mussulmans," and the boy consented. The day on which he turned to Islam, the Shaikh killed an ox, and made a fcast, and gave to the boy the namc of Muhammed. The Shaikh invited all the tribe to this feast. All the people came, and made sport on horseback and on foot. The boy was mounted on the Shaikh's horse, and the people made sport before him, on the way to the Zawiah, where he was circumcised according to the rule of Sidi Ibrahim el-Halil. The Shaikh also said that he had given the boy four hundred mitscals, a man and woman slave, all of which he sent with him to the Zawiah, and placed the boy in the same room with his own son. Their father, the Shaikh, sent them their food. God gave to this boy an excellent understanding, and he committed to memory, the whole of the Koran. He has no other name among the people but that of Sidi Muhammed ben Ali, and is now living at Agellou.

We will now return to the Mussulmans who had come with the Christians, captives to the Shaikh of the tribe Aith Amran. There were only seven of them found, whom the Shaikh bought for one
hundred and fifty mitscals ( 100 dollars) a head, and sent them with his friends from village to village, until they arrived at Suira, and were delivered to the merchants. "Where are the others?" said the merchants. The Mussulmans replied, "Two of them are in the possession of the Shaikh of the tribe of Aith Abí-bekr, who will not sell them to us. The third belongs to the Shaikh of the tribe of Agellou, and two others died at sea, the day on which they were deceived by the Mussulmans." The merchants gave new clothes to the seven, embarked them on board of a vessel, paid their passage-money, and sent them back to the land of the Christians.

THE TOWN OF TEZNIT.
Teznit is like a town, and surrounded by a wall, having two gates. The water of the place comes from a fountain in the centre of the town. The Casbah (citadel) is built over the fountain, of brick, marble, stone, and mortar, and wood from the land of the Christians. In the time of Sultan Mulai Suleiman, his governor resided in this Casbah. After his death, the inhabitants of Teznit sent away his governor, and the whole population, great and small, assembling together, razed the Casbah to the ground. They then collected the stones and wood-work, and built a mosque on the site of the Casbah, over the fountain.

When Mulai Abd-al-rachman became the Sultan, may God assist him! he sent his governors to all the towns and districts; and to Teznit he sent the Kaid Taher ben Masud, of the tribe of Audaiah. He was accompanied by three lhundred horsemen. He arrived at Teznit, and passed three days, during which the people gave him food and barlcy. After these three days he called all the people, and said, "Come to me, and hear mc read the Sultan's order." The inhabitants, great and small, all assembled, and went out to the Kaid, and sat down before him. He read to them the Sultan's ordcr, and said, "that he must enter the town, and reside in the Sultan's Casbal." The inhabitants replied, "We have no Sultan; return to him the road by which you came. The Casbah has been thrown down, and with the materials we have built a mosque in the centre of the town."

Mulai Abd-al-rachman, when he reccived this intelligence, sent his son Muhammed with the Kaid Taher, and six thousand horsemen, against the people of Teznit, who were informed of the expedition. The Sultan's army came, and encamped in the district of Stukha, at a place called Tabuhanaith, which is near the river Elgas. From this place to Teznit is one day's journey. The inhabitants of

Teznit began to be afraid, and sent couriers to other districts, and invited the pcople to come and join them, saying that the Sultan's army had come against them, and insisted upon ayain occupying their castle. They were required, moreover, to rebuild it in the space of one month, under the threat of sending the troops against them, of putting them to the sword, and of destroying their town.

The tribes to whom the people of Teznit sent their couriers, assembled together, among whom were those of Aith Amran, Wadnún, the subjects of Sidi Hisham, the tribes of Idauliteit, Idaubouakel, and those of the mountains, in great numbers. The son of the Sultan remained at Tabuhanaith twenty-two days, and then passing the river Elgas, sent his army against the people of Teznit, who were surrounded by it. They went out to meet the army, and fought the whole day, until sun-set. On the next day, at dawn, they recommenced the fight, and the Sultan's army was driven back across the river Elgas, and lost eighty-seven men and thirty-five horses. They were compelled, after great loss, to retrace their steps to the Sultan.

## THE TRIBE OF TEGERGUST.

The tribe of Tegergust is at the source of the river Sús, and is onc day and a half's journey distant from Tarudant, the daughter of Syria. There are thirteen villages bclonging to the tribe of Tegergust, and two thousand five hundred troops, according to report, and twenty-two hundred houses. The tribe is divided into three sections, which fight with each other. They have each a Shaikh. These threc divisions of the tribe are in a state of constant hostility. When a boy arrives at the age prescribed for the fast of Ramadhan, his father purchases for him a musket and a sword. The market is held in the centre of Tegergust, but no full-grown person ever goes to it without his musket and his sword.

The three Shaikhs take the government in rotation, one every four months. They have jurisdiction over the markets, and impose fines and penalties for crimes committed thercin. They exact the price of souls, when any one is killed at the markets. It happens, that those who commit the murder will not pay the price of souls, denying the charge, and telling the Shaikhs to find the man who committed the murdcr. So they say to the other Shaikhs, until they begin to fight with each other. They go to each other's villages at night, and steal cattle and horses, and kill each other. During the day, they station two horsemen, as guards, between the villages. The villagers thus remain at war, for months, or a whole
year, until the son of Ben Naser ${ }^{1}$ comes through the country, and arranges the difficulties of all the villages.

The son of Ben Naser, Sidi Abú Bekr, comes to the tribe of Tegergust, he and his companions, and takes up his lodgings in the middle of the district. The Marabúts and the Shaikhs, and the great men of the tribes of the adjacent districts, all assemble, to greet the Marabút Ben Naser. He sends his companions to the people of Tegergust, great and small, and calls them together. They are then addressed by the Marabúts, who offer to make peace between them. A conference is held among the people, and one party says, "We will not make peace, until the other party pays the price of the souls of our brethren whom they have killed." The Marabúts addressing the other party, ask "what they have to say to the price of souls?" They reply, "We have not slain the other party's brethren." The Marabúts then say, "that they must pronounce the word of God upon his holy book." The accused consent to swear that they have not slain any of the accusing party. Then the Shaikhs of the other tribes who have assembled together, address the aecusers, and say, " that they must not insist upon the money, for their sakes, and that of the assembled Marabúts." The people of Tegergust reply, "May God curse the money! but preserve to us your favour, that of Ben Naser, and of the Marabúts."

Ben Naser, then addressing the people, says, "I now make peace between you, and whoever shall break it shall pay the penalty of his head, and I pray God that upon him may descend the humiliation of the Jew, and may he always be conquered by his equals!" The Shaikhs of the neighbouring districts who are there in council, say moreover to the people, "We have now been present at the peace made between you, by the Marabúts. Whoever shall break it, shall pay us two thousand mitscals, and we will burn his village, and we will war with the party, until one of us shall conquer."

Ben Naser approves of this resolution of the Shaikhs, and in this way he settles the controversies of the tribes, in all the country of Sús.

> SOME REMARKS UPON THE ARMS USED BY THE PEOPLE OF SÚS.

Muskets and swords, knives and powder, are brought to the port of Aghadir (Santa Cruz) from Christendom. The port of Aghadir is frequented by Christian vessels, where the governor of Sidi Muhammed ben Abdallah resided. His name was Taleb Saleh. During his government, he amassed great wealth. All the munitions that

[^48]came to Aghadir passed, through his hands, and the Mussulmans called the muskets by his name. This Kaid walked out of his Sultan's road, and refused to take counsel of him, and to send him money. If the Sultan sent to him, to require him to do thus and thus with Christians and Mussulmans, he would reply, "I will not take your advice. In this place no one governs but $I$, and all the people of Sús are under me. The Garb (west) I have left altogether to you." ${ }_{1}$

The Sultan, in consequence, sent Sidi Muhammed ben Abdallah with many troops, and gave him much money. He conquered the Kaid and his Divan, and put them in chains, and sent word to the Sultan, saying, "Your governor Taleb Saleh and his followers are in prison." The Sultan commanded Sidi Muhammed, in reply, to have an iron shashia (cap) and a shirt of iron-mail put upon him, and to kcep him in prison, on one loaf of bread a day.

The Sultan sent a letter subsequently to Aghadir, ordering all the merchandise of the place to be shipped on board of Christian vessels, and sent to Suira. Nothing was left at Aghadir, neither muskets, swords, powder, sulphur, cloth, cotton, nor any other merchandise. The commerce in these articles was carried on at Suira, until Sultan Mulai Suleiman died. He increased the place, and said to the Christians, "Send me cannons, mortars, and powder, and I will give you of my produce, such as wheat, oil, wool, and whatever else you may want." The Christians accepted this proposal, and brought from their country the munitions which the Sultan required, and he gave them in return, wool, oil, and wheat.

The Ulema opposed this, and said to the Sultan, "You are not following the law. You are giving wheat, oil, and wool to the Cliristians, and are thus impoverishing the Faithful." He replied, "I must do this for one, two, or three years, until the Christians have brought the munitions of war which I want to place in the sea-port towns, to be able to defeat the Christians when they come to make war upon me."

In the town of Suira there were one hundred and fifty cannons, and forty mortars, under the command of Sidi Muhammed ben Abdallah, who built it. Sultan Mulai Suleiman added to them, and finished the place; may God be merciful to him! Sultan Mulei Abd-al-rachman has not added anything to this town. On the contrary, he has prohibited the introduction of guns, swords, and powder, and limited its commerce to other merchandise. Such is the state of affairs at this day.
${ }^{1}$ This occurred when Jackson, the English merchant, was established at Aghadir.-Sce Jackson's Marocco.

## THE MANUFACTURE OF ARMS IN THE PROVINCE OF SL'S.

There are only three places in the province of Sús where guns are madc. The first is called Tidlee of Idauliteit'; the second is Tislan, in the tribe of Adhergesmukt; and the third is Guran, belonging to the tribe under the mountain, called in Shilha, Dudherar. The number of workmen among the tribes', which we have mentioned, is considerable. They make gun-barrels, pistols, and locks, and whatever else belongs to the armourer's profession. Swords and knives are manufactured only by the Arabs. Powder is made by every tribe, but in small quantities. Most of it is made by the tribe Abu-bouakel, and the inhabitants of Agellou. The son of Sidi Hisham has two blacksmiths, who make guns. No others attempt it, and these two artisans remain in the Casbah constantly. The people of Messa have also two smiths, who make guns and locks.

## VILLAGES BELONGING TO MESSA.

The tribe of Messa contains thirteen villages, the names of which arc, Oghbalu, Oghrimiz, Emlalan, Adoumhar, Aghadir of the market, (Aghadir'mta es-souk) Aith-elias, Tekawit, Aidouloun, Ifintar, Tesnalt, Eldjouaber, Tesila, Ehrouban.

## THE NAMES OF RIVERS WHICH ARE FOUND BETWEEN WAD-N N AND SUIRA.

The first of these passes through the centre of Wad-Nún, and is called Wad-Draa. The second is Wad Tezerwelt ; 3. Wad Elgas; 4. Wad Sus; 5. Tamarght; 6. Aourgah; 7. Aith Aıner; 8. Wad Egezulan; 9. Aidougared (in Arabic, Wad el Halk). Upon this river Aidougared, is built the town of Suira. These are the rivers which are found between the Sahara and Suira. The distances from one to the other are as follow :-One day's journey between Aidougared and Egezulan; from the river Egezulan that of Aith Amer, one day; to Aourgah, half a day's journey; to Tamarght, four hours, or less; from Tamarght to Wad Sús, half a day; to Wad Elgas, one day; to Tezerwelt, one day; from Tezerwclt to Wad Draa, one day and a half; from Wad-Nún to Sahara, is forty days' journey. These are the rivers which flow between Suira and WadNún.

> LAKES.

In thesc lakes the water does not flow, as in the rivers above mentioned. Therc are two of them in the district of Wad-Nún. The one is in the middle of the territory of the tribe Erragabit, and the other in that of the tribe Ezergin.

There are four other lakes; one is in the plains of Idauliteit; one in the district of Ehnabin; a third is among the tribe of Idaugiloul; and the last is in the district of Entuka. These are all the lakes which we know of in the province of Sús.

## THE TRIBES OF WAD-NÚN.

We will now enumerate all the tribes of Wad-Nún: 1. Egelmim; 2. Erafaden ; 3. Ezergaben ; 4. Welcd-bu-baitah; 5. Emdjad, in Shilha, but Karah (scabby-head), in Arabic; 6. Weled el-Ebras; 7. Erregabit ; 8. Ifrin, in Shilha, and Gharan (dens), in Arabic; 9. Aith Musaken; 10. Imtikna; 11. Adoubelal; 12. Weled buSebah; 13. Edeleim ; 14. Audaiah; 15. Tajakant.

These are the names of the tribes which I have known in the district of Wad-Nún. Of those which exist between that district and Sahara, I have no knowledge. These tribes all live under tents, and there is not one house in all the country, except that of the Shaikh Abdallah, of the tribe of Egelmin. This is built of brick, mortar, stone, and marble, from Christendom. The pine, plank, and other materials, were brought from Suira. The masons and carpenters who built this Casbah, werc also sent from Suira. This Casbah is equal to Tangier in extent, and contains a Jcwish millah (quarter), and warehouses (fonducs). It is a market-town, and is surrounded by walls.

This is the relation of the Taleb Sidi Ibrahim ben Muhammed el Messi, el Susi.

Art. V.-Remarks on the Origin and History of the Parawas, by Simon Casie Chitty, Maniyagar of Putlam, Ceylon, M.R.A.S. \&c., \&c., \&c.

In the classification of the Tamil castes, the Parawas rank first among the tribes of fishermen, and they are generally allowed to have been the earliest navigators in the Indian Ocean, like the Phœnicians in the Mediterranean. They are described in the Tamil dictionary, entitled Nigundu Súlamaní, under the head of Neythanilemakkal, or inhabitants of the sea-coast. In Sanscrit they are called Parasaras, or Nishadas, and in Tamil, Parathar, Parathavar, and Paravar. The author of the Historia Ecclesiastica (published in Tamil, at Tranquebar, in the year 1735), identifies them with the Parvaim of the Scriptures, and adds, that in the time of Solomon they were famous among those who made voyages by sea; but it does not appear that there is any solid foundation for this hypothesis.

It is the general belief among the Parawas that their original country was Ayudhya, or Oude; and it appears that previously to the war of the Mahábhárat, they inhabited the territory bordering on the river Yamuna, or Jumna. At present, they are chiefly found in the sea-port towns of the Tinnevelly district, in the South of India, and also in some of the provinces on the N. W. coast of Ceylon.

With regard to their origin, there is a varicty, as well as discordancy, of opinions. Some of the Tantras which have been followed by Mr. Colebrooke, in the enumeration of Indian classes, represent them to be descended from a Bráhman by a Súdra woman, while the Játíbédi Nal (a work of some celebrity among the Tamils), states them to be the offspring of a Kurawa (or basket-maker), begotien clandestincly on a female of the Chetty (or merchant) tribe. But the Parawas have among themselves quite a different tradition conccrning their origin, which is founded on mythological fable. They relate, that their progenitors were of the race of Varuna, ${ }^{1}$ and on the occasion when Siva had called Kartikya ${ }^{2}$ into existence, for destroying the overwhelming power of the Asuras, ${ }^{3}$ they sprang up with him from the sacred lake Sarawana, and were like him nursed by the constellation Kartika. At the close of the last kalpa, when the whole earth was covered with a deluge, they constructed a dhoni,

[^49]or boat, and by it escaped the general destruction, and that when dry land appeared they settled on the spot where the dhoni rested; hence it is called Dhónipura, or the City of the Boat.

The Parawas were once a very powerful people, and no doubt derived much of their ascendency over other tribes from their knowledge of navigation. They had a succession of kings among them, distinguished by the title of Adiyarásen, some of whom seem to have rcsided at Uttara Kósamangay, called at that time the city of Mangay, a place of Hindú pilgrimage in the neighbourhood of Rámnád.

In the Purána, entitled Valévísú Puránam, we meet with the following fable. Párvati, the consort of Siva, and her son Kartikya, having offended the deity by rcvealing some ineffable mystery, were condemned to quit their celestial mansions, and pass through an infinite number of mortal forms, before they could be re-admitted to the divine presence ; on the entreaty of Párvati, however, they were allowed (as a mitigation of the punishment awarded) each to undergo but one transmigration ; and as about this time Triambaka, king of the Parawas, and Varuna Valli his consort, were making tapas, ${ }^{1}$ to obtain issue, Párvati condescended to be incarnated as their daughter, under the name of Tíryser Madenté. Her son Kartikya transforming himself into a fish, was roaming for some time in the north sea. It appears, however, that he left the north, and made his way into the south sea, where, growing to an immense size, hc attacked the vessels employed by the Parawas in their fisheries, and threatened to destroy their tradc; whereupon the king Triambaka made a public declaration, that whoever would catch the fish should have his daughter to wife. Siva now assuming the character of a Parawa, caught the fish, and became re-united to his consort.

In that section of the Mahábhárat entitled adipúrva, it is said, that the king of the Parawas who resided on the banks of the Jumna, having found an infant girl in the belly of a fish, adopted her as his own daughter, giving her the name of Machchakindi ; ${ }^{2}$ and that when she grew up, she was employed (as was customary with the females of the Parawa tribc) to ferry passengers over the river. On a certain day, the sage Púrasara ${ }^{3}$ having chanced to mcet her at the fcrry, she became with child by him, and was subsequently delivered of a son, the famous Vyása, who composed the Puránas. Her great personal charms afterwards induced king Santanu, of the

[^50]lunar race, to admit her to his royal bed, and by him she became the mother of Vachitravirya, the grandsire of the Pandavas and Kauravas, whose contentions for the throne of Hastinapúr, form the subject of the Mahábhárat. Hence the Parawas boast of being allied to the lunar race, and call themsclves accordingly, besides displaying at their wedding-feasts the banners and emblems peculiar to it.

In the drama of Alliarasany, ${ }^{1}$ who is supposed to have resided at Kúdremallé, on the N. W. coast of Ceylon, the Parawas act a conspicuous part. We find them employed by the princess in fishing for pearls, off the coast, and that under a sevcre penalty they were obliged to furnish her with ten kalams of pearls every scason. The fact of the pcarl-fishery is corroborated by the vast quantity of oyster-shells which are found cmbedded in the sand along the seashore, from Pukalam to Kondatjai.

After the conquest of the Dekkan by the Muhammedans, the ${ }^{\text {e }} \mathrm{Pa}-$ rawas were dispossessed of their fishcries, and the Indo-Moors, who were in the neighbourhood, began to treat them with great contempt. When the Portugucse established themsclves in Cochin, the Parawas (by the advice of "Juan da Cruz," who had some time before been to Portugal, and there received into the Catholic Church) deputed some Pattankattys, or head-men, to that place (Cochin), requesting their aid, and having succeeded in obtaining a ship, and some troops, they were soon delivered from the Muhammedan yoke, and resumed their fisheries without any interruption. Shortly after this event 20,000 Parawas embraced the Christian religion; but as their motive was simply to please their new masters, they soon relapsed into Hindúism ; the celebrated missionary Francis Xavicr, however, arriving at Tutocoryn in 1542, and there establishing the truth of the doctrines he preached by miracles, they were again brought to the faith,-and the whole of their tribe, without a single exception, submitted to the pale of the Romish Church. It appears that the Portuguese treated the Parawas with great kindness, permitted intermarriages, and even allowed them to assume their surnames; so that we find among them, many Da Limas, Da Cruz's, Da Andrados, Da Cunhas, \&c. They gave the chief of the Parawas the title of "Dom," and allowed him the exclusive right of wearing a gold chain with a cross, as a badge of nobility.

As soon as the Dutch took possession of Tutocoryn and other adjacent towns, where the Parawas are found, they employed Dr. Baldeus, and a few other ministers of their persuasion, to

[^51]suppress the Roman Catholic faith, and to persuade the Parawas to adopt their own in its stead; but in this they met with a total failure, and wcre once very nearly bringing on a general revolt. Notwithstanding the intolcrance of the Dutch with regard to the Romish church, the Parawas still remember them with gratitude, as they afforded them the means of an extensive livelihood, by establishing in their principal town (Tutocoryn) a public manufactory of cloth, and thus maintaining a considerable circulating capital.

The Parawas are divided into thirteen classes, among which, however, there is little or no distinction, and though I have elsewhere particularized them, I think it proper to notice them in this place.

The first class are chiefly headınen.
The second class are dealers in cloth.
The third class are divers for corals.
The fourth class are sailors.
The fifth class are divers for pearl-oysters.
The sixth class are divers for chanks.
The seventh class are packers of cloth.
The eighth class are fishers who catch tortoises.
The ninth class are fishers who catch porpoises.
The tenth class are fishers who catch sharks and other fish.
The eleventh class are palanquin bearers.
The twelfth class are peons, who wait about the person of the Chief.

The thirteenth are fishers who catch crabs.
The Parawas differ very little from other Tamil tribes, in their features, complexion, and shape. They generally shave the head, but wear large mustachios on the upper lip; and as they consider it a mark of effeminacy to bore the ear, they leave it without any orifice. Among the superior classes, the dress of the men consists of a piece of fine cloth, with tinged borders, called "stmen," which is wrapped round the waist, and reaching to their ankles, cncircles them two or three times, and is then tucked in. Over this is worn a sort of muslin coat, called " angarka," reaching about to the kuee, and over this a shawl, which crosses their body, and is then thrown over the shoulders, gracefully flowing on each side, while the head is covered with a turban, or a flat-topped cap, made of velvet, and often embroidered with gold. In Ceylon, however, the "angarka" is not in vogue, and they have in its place a short jacket, called "asair," (with puffed sleeves,) which is fastened down the front with a thick row of small buttons. . The dress of the inferior classes consists of little else than a piece of cloth, called "cayeli," wrapped round the
waist, and another square piece ealled "urumal," twisted round the head. There is no difference in the garment of the female sex; both the superior and inferior classes wear alike, and it is by the quality alone that they are distinguished. It consists of a single eloth, in the form of a shcet, ealled "chela," which, wrapped round the body, and tueked in under the arm, crosses the bosom, and falls down in large fulds before and bchind, as low as their ankles, like a petticoat; and is sometimes put on gracefully.

With regard to the eeremonies observed by the Parawas on their weddings and funerals, they being for the most part similar to those of the other Tamil tribes, I shall omit their deseription.

The Parawas in Ceylon, though they have headmen of their own, ealled Adapenars, yet are under the control of the Madeliars of the districts in which they live, and during the existence of compulsory labour in the colony, were bound to perform scrvice to government by sea, often without payment. In the South of India they form a distinct community, presided over by a ehief, called Jádi Talavan, or " Head of the Caste," who resides at Tutocoryn, holding his office upon the same tenure as the other Zemindars under the Company's government. He was denominated by the Dutch the "Prince of the Seven Havens," and had formerly many exemptions and privileges annexed to his office; among whieh was one, that he appropriated to himsclf a certain portion of the pcarl-oysters fished off his territory.


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Art. YI.-On Phonician Inscriptions, in a Letter addressed to the Secretary of the Royal Asiatic Society, by Sir Grenville Temple, Bart.

London, November 13, 1834.
Sir,
On my arrival here last week, I found that the Royal Asiatic Society had published a lithographic fac-simile of a Phœenician inscription ${ }^{1}$ which I had found in Barbary, and which I had forwarded to the Society, through Licut. Gen. Forbes: and having also heard that this inscription had occupied the attention of several persons, learned in the languages of the East, I am indueed to scnd you the copies of four others, whieh I diseovered in different parts of the Beylek of Tunis, as well as two which were found at Malta, in 1822, by Signor Bonicci, and which I believe have not hitherto been published.

Nos. I. and II. arc inscribed on a mausoleum at Udukkah وقّة the ancient Thugga. The first is in Phœnician charaeters. Those of the second are to me unknown, but it appears to be a translation of the first. I do not think, however, judging from the manner in whieh they are cut, and from their situation on the monument, that they are coëval with it. In No. II. a resemblance will be observed between the \| with the $\mathfrak{q}$, the $\square$ with $\beth$, or perhaps the $\beth$, the $\bigcirc$ with the Phoenician $\cup$, the $<$ with the Samaritan $<$, and the + with the Phœnician $x$.

No. I. I think may be thus transcribed in Hebrew characters:


Of the precise value of some of the characters I am not eertain, and have therefore marked them by dotted lines. My knowledge of Eastern languages is far too limited to enable me to attempt a translation of this inscription, but from the frequent repetition of the word

[^52][ב, I should suppose that it chiefly refers to the genealogy of some person. Many of the words are perhaps proper names. The few to which I can attach any meaning are the following, לך, 'to you;' עבארת, 'she 1assed;' ' 'עבדת, my servant;' (in the Chaldaic inflcxion) ' ' ' ' that; , ' he destroyed,' or 'overthrew ;' but if the last letter is a 7 , and not a 7 , it will signify 'he kept,' or 'watched; ' אהבן, 'of our love;' כהם, 'like those ;' וברת, 'a daughter,' (Chald.); מסבל, 'a burden;' ללד, 'to bring forth;' אתה, 'you; , צררה, ' כלנה, 'all of us;' 'תe strengthencd; ' confusion, 'תבד, ' Tyre,' (Chald.)

No. III. I found at Esbeebah, dêeml the ruins of the ancient Sufes, (or Sufetibus of the Itinerary,) situated ncar the Wadi-al. Rokhíah, وادي الروحبة -and not far from the base of the Jebel Esmatah, aboul lat

I am unable to decipher it, as well as No. IV. which was found in


One of the two fragments of inscriptions was found at Mahadhar al Hammadah Walad Ayar, and the other at Ghabs, the ancient Tacape.

The first of the Malta inscriptions has been thus deciphered and translated, by the Abbate Marmara, a Maltese, and a very learned and distinguished Oriental scholar:

| לצר כלל | Tyrus perfecta decoris |
| :---: | :---: |
| בעל אבית | Domina classium; |
| שכן כלב | Qui sita sicut cor |
| ענל אן מלֹא | Ast eminens plena |
| רנא ערני ע | Gaudii, voluptuosa |
| רכל דבריט | Supra omnem sermonem. |

The first and last letters of the last line are supplied from conjecture.

I have the honour to bc, Sir,
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Art. VII.-Remarks on a Phonician Inscription presented to the Royal Asiatic Society, by Sir Grenville Temple, Bart., a fac-simile of which was publisled in the third vol. ${ }^{1}$ of the Society's Transactions; also, a Translation of the same, by Sir William Betham.
This inscription is a powerful evidence in support of my hypothesis, for it proves two very important facts: first, "that the Phœenician language is the same as the Irish,"-secondly, "that the Irish character is a modification of the ancient Phenician." ${ }^{2}$

Sir Grenville erroneously calls the stone a sepulchral stone; the inscription declares it to be made in praise of the Tyrian Hercules, or Baal, the Sun, or Apollo, as the figure of the Sun above, and that of the god below the entablature, also evinces, where he is represented as grasping two branches, possibly of olive.

The meaning of the inscription is as follows:
"The learned priests ${ }^{3}$ with harmonious voice will chant the praise of Hercules; ${ }^{*}$ this stone rccords their wise piety; by his influence the troops of the people chase their enemies to the infcrnal regions of decay and death."

The inscription is metrical, and the words are as follow :
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ai orn ab cloi an ald
fon faranic . . . . . . iro
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[^53]Art. VIII.-Remarks on "Paläographische Studien über phönizische und punische Schrift, herausgegeben von Wilhelm Gesenius," Lcipzig, 1835. 4to. pp. 110. Six Plates, by James Yates, Esq., M.A., F.L. and G.S. \&c.

The work, bearing the title here prefixed, is dated "Halle, August 30, 1835 ," and at its close the very learned author expresses his intention of visiting Holland, England, and Paris, in order to examine with his own eyes the Phœnician and Punic inscriptions and coins there preserved. He accordingly passed some time in London, in the Autumn of the same year; and by a personal inspection of some very valuable marbles, of whieh he and other continental seholars had before published explanations from written copies or plaster casts, he has been enabled to settle several points, which were before uncertain. He thus spares no pains to bestow the highest finish upon a work, which he has been many years engaged in preparing; and which he proposes to publish under the following title; "Marmora Phœnicia et Punica, quotquot supersunt, edidit, et premissa commentatione de litteris et lingud Phonicum et Pœnorum explicuit G. Gesenius." He proposes that it should be accompanied by a folio volume of copper-plates, and succeeded by a second part, containing the Phœenician and Punic coins. The present work is intended as a preliminary treatise, explanatory of his views upon the subject, and of some of the principal facts, which he will have oceasion to develop.

The work consists of two parts. The first is a translation of a treatise on the alphabet and language of the Phœnieians, and of their colonjes (Del alfabeto y lengua de los Fenices y de sus Colonias), which was published at Madrid, in 1772, as an appendix to a translation of Sallust by the learned Spanish Infante, Gabriel de Borbon. Its author was Don Francisco Perez Bayer, who, after having been protessor of Hebrew at Valencia, became tutor to the Prince, and was afterwards appointed to be First Librarian in the Escurial. He was esteemed to surpass all his countrymen in extensive erudition; and among other publications of great research, he produced three excellent dissertations on the Maccabean, or Hebræo-Samaritan coins. As Bayer engaged in this inquiry while the study was little advanced, he fell into some errors, which Gesenius has corrected by the addition of notes.

The second treatise in this volume is an original essay by the

German professor explanatory of the coins and inscriptions which have been found in Numidia, and the writing of which differs, in some particulars, from that used in other nations of Phœenician extraction. The author states, that the inscriptions to be published in his great work are more than seventy in number.

Independently of the evidence afforded by the ancient inscriptions, we have sufficient reason to believe, that the language of the Phœenicians and of their descendants in all the flourishing colonies which they planted, was allied to the various dialects of the Semitic stock. Although we must probably wait until the publication of the great work of our Professor for the satisfactory elucidation of the well-known passage in the Ponulus of Plautus, it has long been observed, that many of the words and roots are clearly Hebrew or Aramean. Separate words, intelligible upon the same principle, such as suffetes, the name of the Carthaginian magistrates, occur now and then in other classical writings. Sallust, who mentions that Leptis, a city placed between the Syrtes, was colonized from Sidon, observes that, although its laws and worship remained the same, the language of its inhabitants had been recently changed by intermarrying with the Numidæ. (Ejus civitatis lingua modò conversa connubio Numidarum: legum cult̂̂s-que pleraque Sidonia.-Bell. Jug.) Jerome (on Is. lib. vii. cap. 19.) represents the Phœonician as allied to the Hebrew, and he says the same of the Punic (on Gen. xxxvi. 24); which, however, as he observes, was more remote from the mother tongue. The same is asserted by Augustine, bishop of Hippo, another Phœenician colony on the same coast, where Punic was still commonly spoken in the time of this writer. In his commentary on the epistle to the Romans, Augustine adds, that, when the country-people about Hippo were asked to what nation they belonged, they answered that they were Canaanites. From Joshua ii. it appears, that when the Hebrew spies went to Jericho, and were received into the house of Rahab, she understood them without an interpreter, which was not the case with Joseph's brethren in Egypt. (Gen. xlii. 23.)

Notwithstanding the far morc important place, which the Greeks and Romans occupy in ancient history in consequence of their martial exploits, and the extensive conquests thereby effected, the Phœenicians far surpassed them both in manufacturing industry and in commercial entcrprise. Originally occupying only a small strip of land on the coast of the Levant, they maintained an inland commerce with remote parts of Asia, and were thus more abundantly supplied with the raw materials for their rich and ingenious fabrics. Laden
with these unrivalled productions of their domestic skill, their ships boldly ventured into every part of the Mediterranean, and even penetrated beyond the pillars of Hercules. As population multiplied by virtue of their devotedness to the arts of peace, they planted colonies in Cyprus, Sicily, Malta, and other islands of the Mediterranean; a quarter was assigned to them in Memphis, and they had a considerable establishment at Athens; they occupied the southern shores of Spain, both to the east and to the west of Gibraltar ; and their settlements at Carthage, and along the contiguous coast of Africa, rose to an importance, which excited the jealousy of Rome, and enabled them to contest with her the sovereignty of the world. But, although we have some extracts, which profess to be translated from the Phœenician history of Sanchoniatho, and although a Punic history, composed by Hiempsal, supplied Sallust with materials for his account of the Jugurthine war; yet, with the exception of the beforementioned passage of Plautus, the only specimens of the Phœenician and Punic dialects, which remain to our times, are those discovered either on coins or marbles. These present a few scattered notices of the singular race, to whose various branches they relate; and the industry of a Gesenius is now employed in gathering them from every quarter, like the fragments of one of their own ships, broken into pieces by the storms, and dispersed by the winds of heaven; but which, if collected and recomposed, may enable the antiquary to form some conception of the shape and capacity of the vessel to which they appertained.

In the remainder of this article, we shall present our readers with a short account of some of the coins and inscriptions which have been illustrated by Professor Gesenius, and thus assist them in forming an idea of a department of ancient literature, to which scarcely any attention has hitherto been given in this country.

Corns. Gadira, the name for Cadiz in Greek authors, means in Hebrew a fence, or enclosure. Hesychius (v. Ta $\kappa \iota \iota \rho a$ ) mentions, that the Phonicians used the word in the same sense ( $\pi \epsilon \rho \iota \phi \rho a \gamma \mu a \tau a$ ) : and Festus Avienus, in his Description of the Earth, gives a corresponding explanation:
"Nam Punicorum lingua conseptum locum Gadir vocabat."
"Pœnus quippe locum Gadir vocat, undique septum
"Aggere præducto."
As the Romans sometimes substituted the sibilant for the R in other languages, they called this renowned city Gades, whence the modern Cadiz. Gesenius, in Plate IV. of the present work,
represents five coins, in which the name is written AGDR, or EGDR. The prefix $\mathbf{A}$ or $\mathbf{E}$, (two forms of the same word,) is the definite article, so that by supplying the vowels we have on these coins A GaDiR, or E GaDiR, signifying literally The Enclosure. One of these five coins has moreover the term MELM before A GaDiR; and, as this word mcans, according to its Hebrew derivation, "a striking," (percussio,) the entire inscription signifies the striking, or the coin of Gades. Instead of MELM, the other four coins engraved have another verbal noun, of which there are two forms, MBOL and BOLT. Gesenius, as it appears to us, rightly explains this word to signify the occupants, inhabitants, or citizens of Gades; so that this inscription amounts to the same as Gaditanorum in Latin. These coins of the ancient Cadiz exhibit either a dolphin or two tunnies with the trident, emblems of its maritime relations; and the reverse of all of them shows the head of Hercules, covered with the lion's skin; in regard to which it may be observed, that the sun, the principal deity of Tyre, called Melcart, having been identified with Hercules, we find the form, head, and attributes of this Grecian hero continually recurring upon the coins of Phœenice, and its colonies.

The modern Adra, anciently called Abdera, is another maritime town of Phœnician origin in the south of Spain. Bayer says, that he was in possession of no less than forty coins, discovered in or near this city, the inscriptions on which were in Phœnician, in Latin, or in both of these languages. Various devices are seen upon them, viz., two fishes; a temple with four columns, and sometimes two fishes instead of the two middle colums; a head, perhaps intended for a male divinity. The Phœenician name of the city is expressed by the letters corresponding to the following, OBDRT; and, in consequence of unusual carelessness or want of skill in the die-sinker, they are so formed, that without casting types for the purpose we may represent them by the use of our own numerals, thus, 19990. The fact is, that as the three middle consonants of this word, B, ${ }^{\mathrm{D}}, \mathrm{R}$, nearly resemble one another in Greek, Latin, and English, so they were very apt to be confounded in the writing of all the Semitic nations; and, indeed, their similarity in the Phonician alphabet is the cause of an equal similarity in those alphabets which were derived from it; and it will be perceived, that by adding a tail to $\mathbf{D}$, and amputating the letters on each side of it to the same amount, and then inverting them agreeably to the Semitic practice, all three assume precisely the same form, which is nearly the same with that of our ninth numeral. Of all the letters of the alphabet,
none has sustained so little alteration in its form as the vowel O ; the sound of which was, however, very often interchanged with that of the first vowel A. The final consonant $T$, as it denoted the feminine gender in the Hebrew and its kindred dialects, may be regarded as answering to the last vowcl in ABDERA, A being equally the sign of the feminine in Latin; and thus we see a rery exact correspondence betwcen the name as cxpressed in Phœenician and in Latin. In two of the six Abderite coins published by Gesenius, the reverse exhibits the head of Tiberius Cæsar. In these also we sce the five lettcrs, which express the Phœenician name, ingeniously fitted into the triangular pediment of the temple,

on the principle commonly adopted by the ancient architects, who put the largest and highest statues in the middle of the group, and used the small or recumbent ones to fill the two augles at the base. We have only to observe, further, that in one of these coins of the Augustan age, the six letters of the Latin name ABDERA are disposed on the outside of the colonnade, and in the intercolumniations of the pillars, while the Phœenician name is in the pediment above.

Mahanaim is familiar to every reader as the name of a place in the Old Testament. It signified an eneampment; and, as the Latin Castra, and the corrcsponding terms in various other languages, often beeame the proper names of cities, it appears à priori probable, that Mahanot or Mahanoth (the same word, only with a feminine termination) may have been the name of some of the Phœnician cities. On this supposition Gesenius explains numerous coins of $\Pi$ аvop $\mu$ os, the modern Palermo, which are inseribed with Phœenician charaeters. Thucydides (l. vi.) testifies that this was a Phœnician colonv. The coins before us exhibit the usual Phonician emblems, the date-palm ( $\Phi \circ \iota \nu \iota \xi$ ), the head of Hercules covered with the lion's skin, the Nemean tion itsclf, and the head of the horse, which, as the horse was sacred to Neptune, had reference to the worship, which Palermo as a maritime eity, and the Phœnicians in general as a commercial people, paid to that Deity. That these emblems belonged at least to
the ancient Palermo (Mavopuos) is certain, because they are found on coins with the Greek inscription Mavopucrav. The two coins before us, besides the devices which have been mentioned, exhibit inscriptions corresponding to the following letters of our own alphabet, OMEMHNT and MOMMHNT; or, if we adopt the common Hebrew characters, עעם מחנת and עם המ חנת Each of these forms expresses the same sense, viz., Of the people of Mahanot; which, on the assumption that Mahanot was the Phoenician name for Palermo, amounts to exactly the same thing with the above-mentioned Greek inscription Пavo $\mu \iota \tau a v$.

We shall only describe another coin, belonging to Carthage. (Plate III. No. 2.) On the one side are the heads of two men with the following inscription round them; ARISTO. MVTVMBAL. RICOCE. SVF. It is in Latin characters. SVF. stands for Sulfetes, and the heads may be presumed to be those of Carthaginian magistrates. Aristo appears to be the name of one of these magistrates. Mutumbal was another, and his name, which signifies literaily Baal's man, supplies a curious illustration of another Carthaginian name found in Plautus, viz., Metuastartus, meaning literally, Astarte's man. As the one individual was devoted to Baal, the sun, the chief god of Phœnice, so the other was at his birth dedicated to Astarte, the Ashtaroth of the common translation of the Old Testament, who was the same as the moon, and the principal Phœenician goddess. The coin under cxamination shows on the other side a temple with four pillars, and the inscription VEN COL KAR, i. e. Veneris (templum), Colonia Karthago. This coin was, therefore, struck as late as the time of Julius Cæsar ; since by him Carthage was made a Roman colony. The erection of a temple to Venus was in conformity with the usual practice of the Phœnician colonists. For the Venus of the Romans was identified with the Astarte of the Tyrians and Sidonians. The worship of Venus at Paphos in Cyprus, and of the Venus Erycina in Sicily, are only specimens of the general practice of the Phœnicians in erecting temples for the celebration of their national worship, accommodated perhaps to local habits and ideas, in all places where they established themselves.

Inscriptions.-Among the marbles which appertain to this subject, we shall first mention the Inscriptio Bilinguis of Malta. This was brought to light in the year 1735, and the illustration of it was first attempted by Fourmont, and next by the Benedictincs in the Nouveau Traité Diplomatique. Barthélemy afterwards undertook the task, and was so intent upon it, that he even formed the inten-
tion of going to Malta to examine the marble itself, but was prevented from accomplishing this design by the arrival of a cast of it in plaster. He was very successful in his explanation, published in Vol. xxx. of the "Mémoires de l'Académie des Inscriptions;" although, relatively to certain parts of it, he was opposed by our countryman, Swinton, in the Philosophical Transactions, Vol. liv. An increased interest had been excited in favour of the study by the learned traveller, Dr. Richard Pococke, who found among the ruins of Citium, in Cyprus, a great number of Phœenician inscriptions, which he had the merit of copying with considerable accuracy, and published A.D. 1745, in the second volume of his travels, although he was quite unable to read them, and did not even know with certainty in what language or character they were written. Thus do the wealth and enterprise of English travellers continually supply food for the learning and ingenuity of foreigners, and especially of the Germans.

The bilingual inscription of Malta consists of two parts, the upper Phonician, the lower Greek. It is on two candelabra, the one of which is preserved in Malta, the other in Paris; and it is entire on each candelabrum. Gesenius has in the work before us (Plate II.) given the whole inscription as it is seen in the Paris copy; and he reads it as follows, showing that the candelabra were dedicated by two brothers of Tyrian extraction to Melcart, the principal divinity of Tyre.

> לאדנן למלקרת בעל צר אש נדר
> עבדקָ עבדאסר ואחי אסר־שמר שן בן אסר־שט־ בן עבדאסר כשמעקלכ יברכコּ

He understands the sense thus :-
To our lord Melcart, tutelary god of Tyre.
I who thus fulfil my vow am thy servant Abdasar with my brother Asar shamar, tile two sons of Asar-shamar, the son of Abdasar.
On hearing their voice may he bless tilem.
We perceive from this inscription, that the last-mentioned Ab dasar was the father of Asar-shamar, who had two sons, the elder called Abdasar after his grandfather, the younger Asar-shamar, after his father.

Asar was the Egyptian divinity Osiris ; and the adoption of this name in a Tyrian family may perhaps be best accounted for, by
supposing that some of the members of it had joined the Tyrian colony at Memphis. (Herod. ii. 112.) We know also, that there was continual intercourse between Tyre and Memphis for the purposes of commerce. It appears, then, that some Tyrian merchant, who traded with Memphis, and perhaps dwelt there in the quarter of the city allotted to his countrymen, dedicated his son to Osiris, the principal divinity ; and hence called him Abd-Asar, or ObedAsar, which means the servant of Osiris. It may deserve inquiry, whether Esar-haddon, Tiglathpileser, and Shalmanezer, had not a similar reference, since the name common to them all is in the Hebrew the same, אסר. Swinton says Asar was the name for God. (Phil. Trans. vol. liv.) The meaning of the other name, Asar-shamar, does not appear; althougl_ from the subjoined Greek inscription it appears probable, that it had some reference to another principal divinity of Egypt, Sarapis, or Serap is.

The explanatory Greek inscriptions annexed to the Phœnician, always recognise a comparison, or rather identification of the deities of Phœnice with those of the countries in which the inscriptions were put up ; and, upon this principle, the names of the individuals, who are called after certain deities, are always translated by Greek appellatives, having a reference to the corresponding Greek divinities. Of this we have a remarkable example in the bilingual inscription, which we are now considering. The Greek is as follows, and it strikingly illustrates the Phœnician.

## $\triangle I O N T \Sigma I O \Sigma K A I \quad \Sigma A P A \Pi I \Omega N$ OI $\Sigma A P A \Pi I \Omega N O \Sigma$ TYPIOI HPAKAEI APXHГETEI,

i. e. "Dionysius and Serapion, the sons of Scrapion, Tyrians, have dedicated these to Hercules, the Prince."

Ptolemy, the geographer, mentions that there was a temple of Hercules in Melite. The two candelabra, which served as lampstands, were no doubt deposited therein. Melcart, who is mentioned in the Phœnician part as the principal deity of Tyre, was always considered as corresponding to the Greek ${ }^{`}{ }^{\prime}{ }^{\circ} \rho a \kappa \lambda \eta \varsigma$, and is by Latin authors called Hercules Tyrius. In like manner we have in this inscription the Greek name $\triangle I O N X \Sigma I O \Sigma$ corresponding to the Phœnician Obed-Asar; because the Greek $\triangle I O N T \Sigma O \Sigma$, or Bacchus, was supposed to be the same with the Egyptian Osiris. We see likewise, that $\sum_{A} A P A \Pi I \Omega N$, which means the son of Sarapis, is put for the Tyrian Asar-Shamar, both as the name of the father and of the son; but why the one was used as equivalent to the other we cannot explain.

We proceed to the explanation of another inscription, which occurs on a monument belonging to Von Scheel, at Copenhagen :

## לרבתן תלת ולבע <br> לן לאדנן בעל חמן <br> אש גדר עבד־מלקרות השפט בן בר־מלקרת בן חנא

i. e., "To our mistress Talat, and to our lord, our master, the Lord of heat. The man, who thus pays his vow, is Obed-Melcart, the judge, son of Bar-Meleart, the son of Hannah."

In this inscription we have mention of the two principal divinities of Tyre, the sun and the moon. The sun is here designated as "the Lord of Heat." He was also commonly called Melcart, which means "King of the City;" and the person who offers the present, or makes the dedication, is called from him Obed-Melcart; his father having also been devoted to the same deity by the name of Bar-Melcart.

The moon is here called Talat, the virgin or damsel, the word being the same which we have in the Gospels in the expression Talitha Kumi. Hannah must here be taken as the name of a man, although it was also used as a woman's name. It is indeed obviously the same with the name of Annas, the High Priest, mentioned by the evangelist Luke and by Josephus.

The two inscriptions, which have been explained, belong to one class, that of Anathemata ( $\alpha \nu a \theta \eta \mu a \tau \alpha$ ), offerings or dedications. We shall now direct our attention to two, whieh belong to a different class, being monumental or sepulchral. Both of these are bilingual, and they illustrate one another in a very extraordinary way. As they occur on stelce of Pentelic marble, are of similar and very elegant workmanship, and were both found along the track of an ancient way, which led from Athens to the Grove of Academus; the illustration of thcir history and relations requires some previous notice of the connexion between Athens and Phoenice.

The Phenicians seem to have remained longer at Athens than at most other places where they settled. In Hesychius we find them recognised as forming a distinct race among the inhabitants;
 flourished nearly 300, B. C., was entitled $\Delta \iota a \delta \iota \kappa a \sigma \iota a \quad \Phi a \lambda \eta \rho \epsilon \omega \nu$
 of the Phalereans against the Phoenicians concerning the priesthood in the temple of Neptune." From this circumstance it appears probable, that the Phonicians claimed the right of appointing the
priests in a temple of Neptune at Phalerum. The ease appears to have been analogous to that in the island of Rhodes, where the Phœniciaus had dedicated a temple to Neptune, near Ialysus ; and the priesthood was preserved among their descendants, who continued to reside there as part of the Rhodian eommunity. (Diod. Sic. vol. i. p. 377.) Of the friendly relations subsisting between Athens and Phœniee, a very interesting proof is exhibited in an inseription upon marble, which was formerly plaeed in the Aeropolis at the back of the Parthenon, and whieh is now preserved at Oxford. It is published by Chandler, Marm. Oxon. ii. 24., and by Böekh, Corpus Ins. Grecarum, vol. i. p. 126. It is a deeree of the Athenian senate, that in eonsequence of the good eonduct of Strato, king of the Sidonians, towards the Athenians, he should reeeive from them whatever he requested ; that he and his elildren were to be regarded as $\pi \rho \circ \xi \in \nu \circ \iota$ to the Athenian people, ${ }^{1}$ and the senate was to fix upon a symbol, ${ }^{2}$ so that the Athenians might know if the king of Sidon sent to request anything from them, and that he might know in like manner if they sent to him. It is also determined, that the ambassador, who had eome from the king of Sidon, should be invited to a public entertainment the next day in the Prytaneum, whieh was like inviting a publie man to a dinner at the Mansion-house amongst us. A further provision is made respecting eitizens of Sidon resorting to Athens for the purposes of trade, that they should not pay the Meтoькıov, or strangers'-tax, or be subjeet to other public eontributions. Böekh thinks the decree was passed Ol. 101-103, i.e., some time from 372 to $364 \mathrm{~B} . \mathrm{C}$. The aeeount given by Theopompus ${ }^{3}$ of the unbounded luxury of Strato proves, that the eommeree and manufactures of Sidon were, during his reign, in a very flourishing eondition; whieh, however, seems in this, as in many: other eases, to have made that eountry more an objeet of the envy and eupidity of eonquerors, and less able to defend itself by the virtue and courage of its citizens; so that it was very soon subdued, and fell from its aneient glory in the reign of Tennes, who was either the suecessor of Strato, or perhaps the same person. ${ }^{4}$
$\triangle$ The faets whieh have been mentioned, are suffieient to show that the Sidonians earried on a flourishing trade with the Athenians, and that this intereourse led to the settlement of a company, or small eolony of the Phœnieians at Athens. With these faets then in view

[^54]let us proceed to the explanation of the two bilingual monuments discovered among the ruins of that city.

One of them is preserved in the Louvre at Paris, and is marked No. 983 in the Salle des Candelabres. Its explanation has employed the ingenuity of Akerblad, Millin, Silvestre de Sacy, and lastly, of Professor Gesenius, whose reading and versiou of it arc published by Böckh in his Corpus Inscrip. Gracarum, Vol. i., Fasciculus ii. No. 859, p. 523. Professor Böckh thinks its date later than the 100 th Olympiad, consequently later than 376 в.c., and coinciding very nearly with the date of the decree already cited.

We shall first consider the Greek part of the inscription, although it is placed under the Phœenician. It gives the name and country of the person deceased, NOTMHNIOE KITIETइ, i.e., "Numenius of Citium." The birth-place of Numenius, Citium, is well known as a town in Cyprus, which was one of the principal Phœenician settlements, and an intermediate port between Sidon and Athens. The Phœencian part of the inscription is read by Gesenius, thus: לבנחדש בן עבד־מלקרת בן עבדשמש בן תגנץ אש כתי, i. e. "To Ben Hodesh, son of Obed-Melcart, who was the son of Obed-Shemesh, the son of Taggenaz; a native of Citium."

Thus, it appears, that the real name of this individual was Ben Hodesh, (the son of the New Moon,) of which Nov $\mu \eta \nu \iota o s$ is a correct Greek translation. He was probably so called, not only in honour of Astarte, but because he was born at the time of the new moon. His father was Obed-Melcart, which means the servant of Melcart, and his grandfather Obed-Shemesh, which means the servant of the Sun; and it is remarkable that the same deity appears here to be recognised under two names, being called both Melcart (King of the City), and the Sun. There remains the name of the great grandfather, Taggenaz, which Gesenius translates a wreath, and supposes to correspond to the Greek $\Sigma \tau \in \phi=10 \%$.

The other bilingual inscription from Athens is now preserved in the United Service Museum, in London. Many learned men have also employed themselves in explaining this monument, though without observing that it had any connexion with the other. Those who have written upon it. are Akerblad, Tychsen, Bellerman, Kopp, Hamaker, and Bres. Dodwell has published an engraving of it, "Travels in Greece," Vol. i. p. 411. ; and Böckh, "Corpus Inscrip." No. 894 , has published it with the interpretation sent to him by Gesenius. Böckh esteems it to be of later date than the decree in honour of King Strato. The Greek part of the inscription is at the top; APTEMI $\triangle \Omega P O \Sigma$ HAIO $\triangle \Omega P O T ~ \Sigma I \triangle \Omega N I O \Sigma$.

The Phoenician part is read as follows :

> מצבת זכר בחים לעבד־תנת בן עבד־שמש הצדני
i.e. "A pillar of memorial among the living for Obed-Tanat, son of Obed-Shemesh, a Sidonian."

Here Obed-Tanat, the servant of Tanat, corresponds to the Greek $A \rho \tau \epsilon \mu \iota \delta \omega \rho o s$; and we know both that the Greek $A \rho \tau \epsilon \mu \iota \varsigma$ was identified with the moon, the chief female divinity of the Si donians, and that this female divinity was called Tanat, or Tavaitıs. The inscription records, that Obed-Tanat, or Artemidorus, was the son of Obed-Shemesh, who, as his name imports, was dedicated to the sun, the principal male divinity of the Sidonians, and who is, therefore, called in Greek, ' $H \lambda \iota o \delta \omega \rho o s$.

Now it is remarkable, that the name Obed-Shemesh occurs in both of these monuments; and, as they are remarkably similar in their sculptured ornaments, so that they may even be supposed to have been wrought by the same hand; as they belong, moreover, to the same period of time, and were both found so near that we may suppose them to have been erected in the same cemetery, in which, according to Pausanias (i. 29), many eminent men were buried, we seem authorized to conclude, that the name ObedShemesh refers in both to the same person, and that the family to which it belonged was one of wealth and distinction. The two monuments taken together, present to us the following genealogy.


Thus it appears, that Artemidorus, whose monument is now at London, in the United Service Museum, was the uncle of Numenius, whose monument is in the Royal Museum at Paris. It is also evident, that they belonged to a flourishing mercantile house, part of which had migrated to Athens, and which had an intermediate settlement at Citium in Cyprus, so as to maintain a profitable commercial intercourse between these three places.

Numerous monuments with Phœnician, or rather Punic inscriptions, have bcen found within the last fifteen years in the kingdom of Tunis, and in the region of North Africa, which belonged to Carthage and Numidia. They are written in a character, which in some
measure differs from that of the other inscriptions; and, to explain the nature of these differences, is the object of Professor Gesenius in the Second Part of the volume before us.

These African monuments are divisible into two classes. The first consists of monuments, in which the writing is like original Phœenician. These have all been found either among the ruins of Carthage itself, or at least in the neighbourhood of Carthage. Hence Gesenius calls this kind of Punic writing Scriptura Urbana. He refers as examples, to an inscription now at Leyden, represented by Hamaker, in his Miscellanea Phœnicia, Plate I. No. I.; to another discovered by Falbe, the Danish Consul, and described in his Emplacement de Carthage, which was erected in memory of a fuller; and to four published by Hamaker, in another and earlier work, called Diatribe, Monumentorum Punicorum nuper in Africa repertorum interpretutionem exhibens. Leyden, 1822.

The second class of these African inscriptions consists of those which have been found in provinces at some distance from Carthage, partly belonging to the Kugdom of Numidia. They are written in a more loose and negligent manner than the othcrs. The letters consist of fewer strokes, so that those which are similar become undistinguishable; just as five of the Estrangelo Syriac letters become undistinguishable in the Cufic. This less-distinctly characterized writing, is called by Gesenius, Scriptura Rustica, or Numidica. The Spanish coins show the same negligence in the manner of inscribing certain letters of the alphabet: the peculiarity of the Numidian writing, which is found even on the coins of Juba I. and II., consists in the prevalence of the same negligent manner in all the letters. These inscriptions, whether from the provinces of Carthage, or from Numidia, belong to the time, when these countries were under the dominion of Rome.

The first example of the Scriptura Rustica, produced by our Professor, is that of a stone from Leptis, which was formerly in the British Museum, and is now at Virginia-Water in Windsor-Park. It formed anciently part of a triumphal arch. It exhibits the Latin letters AVG. SVFF. for Augustalis Suffectus, the name of an officer, whose duty it was to attend to everything expressive of honour to the Imperial House. Under these letters is a Punic inscription, which Gesenius explains to signify, "The Imperial House of Rome stands for ever." On his late visit to England, the Professor went to Virginia-Water to inspect this and another Punic inscription, now forming part of the artificial ruin at that place.

Among the examples of this kind of writing, is the inscription discovered in North Africa by Sir Grenville Temple, and lately presented by him to the Royal Asiatic Society, in London. This is engraved by Gesenius in the present work (Tab. VI. D.) together with one (Tab. VI. E.), which was discovered by Von Scheel, Secretary to the Danish Consulate, and which is now at Copenhagen. Respecting these hitherto unexplained monuments, our author makes the following observations. "These inscriptions," says he, "as I found to my extreme surprise and delight, are the only ones, which, besides their importance in reference to the language and mode of writing, possess also an historical interest. Whilst those which have been hitherto deciphered contain only votive offerings to the gods, or sepulchral records of private persons unknown in history, and of no public consequence, thcir interest depending chiefly on the philological analysis of the proper names, and on the inferences deducible from them in reference to the religion (cultus) of the Phœnicians and Carthaginians; these two inscriptions, on the contrary, present the names of a series of Numidian governors, well known, and even illustrious in history, in the same order of succession which we find in the classical authors. These princes are designated by their native names, with an evident Semitic etymology, which the Greeks and Romans altered so as to adapt them to their own pronunciation; but their identity remains, notwithstanding this change in their form." Gesenius reads and translates the two inscriptions as follows:
לאדן בעל ח' מלך ע' שמע
קלת חכמבעל אדן למלכת עלם
עמת מוע) שלים בן משיבעל בן
מעשנשן בן מצנתבעל
i. e. To the master, the lord of heat, the eternal king, who hath heard the prayers of Hicembal (Hiempsal), master of the eternal kingdom of the people of the Massylians, son of Mesibal (Micipsa), son of Masinissa, son of Maznatbal (Mastanabal).

i. e. To the master, the lord of heat, the eternal king, who hath heard the prayers of Hicmatbal (Hiempsal) the king, son of Hicebal (Hiempsal), son of Mosibal (Micipsa).

The letters marked with an accent are abbreviations for entire words, viz.: $\quad$ for $\begin{array}{r}\text { for } \\ \text { fo } \\ \text { fo , עלן } \\ \text { for }\end{array}$

These two parallel inscriptions are well illustrated by certain others, which were published a few years ago by Humbert and are also figured and explained by Hamaker, the Professor of Oriental languages at Leyden, in his Miscellanea Phænicia, and which exhibit the same form of votive dedication with immaterial variations. One monument of this kind represents a rude figure of Baal, holding a pomegranate in his right hand, and a bunch of grapes in his left, emblems of the sun's power in bringing the fruits of the earth to maturity.

The name of the king who erected the former of these two inscriptions is Hicembal, which means, Baal hath made wise, or Instructed, enlightened by Baal. Hicmatbal, or Hicemtbal, 'in the second inscription is in substance the same, and means the Wisdom of Baal, being however the name of a different person. If we take Hicemtbal, omit c, change t into s , and b into p , and transpose, we have Hiempsal, the form used by the Latin historians.

Mosibal evidently means the Work of Baal, or Created by Baal and Gesenius endeavours to identify this name with the Latin Micipsa.

The result of the interpretation of the former inscription is, that Hiempsal I., son of Micipsa, king of the Massyli, caused this stone to be erected in honour of the great national deity of Carthage and Numidia. He may have erected it in fulfilment of a vow; and, certainly, with a view to somesuccess, granted in answer to his prayers either by a victory, a fruitful season, or some other fortunate event.

Gesenius supposes Hicembal, Hicemtbal, and Hicebal, to be, like the German Joannes, Johann, and Hans, three forms of the same name; and, since it appears that the Hicembal of inscription D, is the same individual as the Hicebal of inscription $E$ (for each is assigned to the same father, Mosibal), we are able to make out a genealogy, and the following table will show the correspondence of the names as used in the two inscriptions and by the Greek and Latin authors.

| Inscription D. |  | Inscription E. |  | Classical Authors. |
| :---: | :---: | :---: | :---: | :---: |
| Maznatbal |  |  | $=$ | Mastanabal |
| $\stackrel{\text { Masnisn }}{ }$ |  |  | $=$ | Masinissa |
| $\stackrel{1}{1}$ |  |  | - | Ticipa |
| Mosibal | $=$ | Mosibal | $=$ | Micipsa |
| Hicembal | $=$ | Hicebal | $=$ | Hiempsal I. |
|  |  | Hicemtbal | $=$ | Hiempsal II. |

The general result of the explanation of these monuments is, that they tend, especially by the evidence of the Proper Names compounded of Baal, \&c., to show a general identity of language, writing, and religion, between the Numidians and the Carthaginians; and thus to connect all with the Phonicians, and to prove the extension of this people along a large part of the north coast of Africa, lying westward of Carthage.

At the conclusion of his interesting and instructive work, Professor Gesenius gives a view of the Numidian alphabet, which will be of great service to those who may attempt to decipher the monuments yet to be discovered in this unexplored field of learned and curious research.

## Postscript.

London, April 11th, 1837.-I have the satisfaction to announce, that since the preceding remarks were written, my very learned and distinguished friend has published his greater work under the following title; Scriptura Lingucque Phenicia Monumenta quotquot supersunt, \&c., edidit Gul. Gesenius. Accedunt 38 tabula lithograpta. Lipsie, typis Vogelii. 4to.
J. Y.

## Art. IX.-The Medical Art amongst the Chinese, by the Rev. C. Gutzlaff.

Read 18th February, 1837.
"The following paper on the state of the Medical Art amongst the Chinese, has been recently presented to the Royal Asiatic Society, by the Right Hon. Alexander Johnston. He, as Chairman of the Committee of Correspondence of the Society, has for some time instituted a variety of inquiries into the state of that art, in the different parts of Asia. This paper has been sent to him by the Rev. Mr. ${ }^{\text {' }}$ 'Gutzlaff, the intelligent and zealous Protestant Missionary in China, who forwarded to him, some time ago, the very curious and interesting analysis of the Chinese work, called the Yi She, which has been published in the last number of the Journal. The extent of the Chinese empire; the number of its inhabitants; the progress which they are known to have made from the earliest times in arts, manufactures, agriculture, and different branches of civilization; the nature and value of the mineral and vegetable productions of their country; the knowledge which they possess of the properties and uses of those productions; the varicty of the climates to which they are subject in the different parts of the empire; the nature of the numerous diseases from which they suffer; the jealousy with which the Chinesc Government have hitherto excluded foreigners from all intercourse with the people, and the obstacles which they have opposed to the acquisition by foreigners of all authentic information relative to their country, render a paper of this description, at the present moment, when the Parliament of Great Britain has opened the trade with China to all British subjects, an object of interest and public utility, the more so, as Sir Alexander Johnston, having submitted it for perusal to Sir Henry Halford, has received from that gentleman, who is so distinguished in his profession, and has transmitted to China a set of queries which are calculated to elicit from the Chinese such information as is deemed valuable by those who are professionally acquainted with the subject in this country."

## Mr. Gutzlaff's Paper.

Unaided by foreign discoveries, the Chinese have themselves established a medical system, which, according to tradition, is as ancient as the monarchy itself. They have drawn the whole science from the experience of the ancients. To Shin-nung (the divine husbandman) is the honour ascribed of having laid the foundation of this useful art. Having introduced the cultivation of corn amongst his people, he thought, that heaven bestowing upon mankind plants for nourishing the body, had also created herbs to remedy diseases. He therefore examined thcir qualities, and communicated the result of his researches to the people. From the longevity of his contemporaries it has been justly inferred, that the remedies invented by him must have been very excellent. The system established by his practice has therefore been generally adopted. A Chinese physician knows now exactly what drugs should restore a patient, after having carefully ascertained the disease ; if, however, he dies, it is owing to accident, and by no means to his physician's want of skill. If, on the contrary, the physician follows a method of his own, and the sick person dies under his hand, he is amenable to the law.

Chinese doctors excel in the knowledge of the pulse, and are able to ascertain with considerable accuracy the state of the patient; they are well versed in the use of simples, but are ignorant of anatomy, helpless as surgeons, and in time of sudden danger next to useless. If any patient who has met with an accident dies under their hands, they are responsible to government, and may be punished for manslaughter. Hence their timidity of entering upon any difficult case, where all depends upon prompt exertion, or where life is nearly extinct.

In China physicians are by no means a privileged class, nor have they to pass an examination. Every one who has read a certain number of medical books may practise, and the government takes no notice of him, unless he kills people against the established rule. Doctors are often unsuccessful literary candidates or poor scholars, who must do something to earn their livelihood; on this account large numbers of them are to be found in every city, and even the smallest village has a practitioner. Their fees are very small, and the profession by no means in high repute. There are, however, some men, who by success have established a reputation, and who have acquired honours and riches by their practice, but,
compared with the multitudes of quacks and mountebanks，they are exceedingly few．

Government，however，encourages the study of medicine in the capital，where a medical buard is purposely established，to watch over the health of the reigning family．In large cities are also to be found dispensaries，where the poor receive gratuitous medical aid from doctors in the pay of government．

In many invetcrate diseases the doctors refusc to wait upon the patients，because the disorder is declared by the rules of practice incurable．Whenever a sick person cannot eat rice，the physician gives up his case as hopeless．The Chinese have therefore a common saying，that most people die because they will not eat rice， a caprice which costs them their life．

Since simples are either given in a decoction or in a bolus，it frequently happens that a poor patient，unable to swallow the medi－ cine，is suffocated．Sudden fainting，paleness and tremor，are to be relieved by pouring the blood of an animal，when still warm，down the throat of the sufferer；under such circumstances instant death is by no means unfrequent．But such accidents create little sensa－ tion，because it is dying according to the system established by the ancients．

The Chinese possess one great advantage over Europeans．They can take the most nauseous drugs with stoical indifference，and have generally a very strong constitution；even when afflicted with the most painful malady，they still move about，and are able to support the most excruciating pains．Detesting the sight of blood， phlebotomy is almost unknown amongst thern，and the terror in－ spired by bleeding renders the remedy much more dangerous than the distemper which it has to remove．A careful study of their medicine might possibly lead to some valuable discoveries，but the Chinese works treating upon the science are so numerous，and the advantage derived from their perusal so trifling，as to discourage the foreign reader．The writer wishes to give in this essay an outline of
 Approved Marking－line of Medical Practice，a very celebrated work， in forty volumes ；seven volumes contain nosology，六体 $>\frac{1}{\pi}$ （Tsă ching）；eight volumes plarmacology 类状 $\overline{\jmath 1}$（Luy fang）； five volumes pathology 1 分 $\frac{414}{7}$（Shang han）；six volumes
surgery $/ 8 /$ ，委 + （Wae ka）；and the remaining volumes treat upon the diseases of women and children 名力 女 多 管 （Yew neu ko．）

It ought to be remarked，that the Chinese，in dividing a science， are not strictly logical，and that whatever names we apply to their divisions，they do not fully express the verified contents．The above nomenclature will consequently be found very imperfect； we have，however，adopted it for want of a better onc．

## I．Nosology．

The human body is composed of water，fire，wood，metal，and earth，the five elements which constitute the substance of every－ thing．As long as the equilibrium between them is maintained， people enjoy health ；as soon as one becomes predominant，sickness ensues．All diseases arise from disturbing the natural state of these component parts，and the art of healing consists in restoring their mutual relation．A physician ought therefore first to ascertain which of the elements has gained the ascendency over the others， and，after mature deliberation，he should endeavour to counteract its baneful effects．

Inflammatory diseases arise from the prevalence of fire．If the limbs are cramped，the throat rattling，and the patient in a fainting state，give the decoction of ginger，hemp oil，and aromatic pills；or a taël of ginseng decoction，and san sang with the juice of ginger． If，after having used some stimulants，the patient revives，there is some hope；otherwise he is incurable．If persons suddenly faint，because the phlegm has run over the heart，the most effectual remedy is a fumigation with vinegar，whereupon it returns to its vessels；but if the patient drink a drop of water it settles there，and he must die． When the eyes are yellow，the muscles contracted，and the mouth parched，a dose of bezoar－stone or rhinoceros－horn will be very efficacious．Distorted eyes and mouth arise from the prevalence of wood over the metal，which contracts the muscles．Under such circumstances earth also changes its nature，its power relaxes in the interstices，the eye becomes hollow，and the muscles arc contorted， as may be abundantly proved from the classics．If the patient is fainting，and becomes quite cold，give him aromatic pills and musk in liquid，and as soon as he revives，examine him upon the probable causes of the disease．Thesc are various，but a skilful physician attends to the symptoms，and treats his patient accordingly．The
remedies naturally differ, but tonics and aromatics may always be relied on.

If prompt measures be adopted with persons who have hanged themselves, there is some hope of bringing them to life again. After they have been carefully cut down, they are stretched out on the ground; one man places his feet upon the arms, and twists the hair round his hand, whilst another puts his hand upon the breast and rubs it, and a third bends the arms. As soon as the patient revives, give him decoction of cinnamon and rice-water. If there still exists a difficulty in swallowing, let a man blow with a tube into his ears ; this is a most excellent way of restoring people to life. If the patient has recently hanged himself, it will be sufficient to blow air into his mouth; if he has hung too long, it is in vain to try to revive him. Persons who have been apparently killed by pressure may be revived by pulling the hair and blowing powder into the nose. Drowned persons ought to be placed across the back of a cow or laid over a bench, in order to expel the water. If the accident happens in winter, he must be carefully covered with blankets, and rubbed with stimulants. Those who are under the influence of demons, and exhausted with excessive pain, ought to have their nose twisted, their face spit upon, their feet bitten, and their elbows burnt, to awaken them from the stupor.

The temperature of the air has a great influence upon the human body; heat acts most destructively upon the body, but nothing affects so much the elements of which it is composed as a parched atmosphere. Everybody who treats these diseases ought to be perfectly conversant with its nature and influence upon man, in order to remedy the evils arising from it.

Headach accompanied by heat, a general dejection of spirits, and thirst, arises from the fire of the heart ascending into a flame, and injuring the lungs. In all these and similar cases the pulse ought to be accurately examined, for which the author gives very minute rules, and suitable remedies used, which have been handed down by the ancients, and have generally proved effectual.

There are from thirty-six to ninety-nine maladies arising from the influence of evil spirits. The patient becomes reserved, speaks nothing, and though his whole body is affected with the evil, he himself does not know what ails him. The disease increases gradually, and ends in the prostration of all strength, and death. Aromatics and perfumes here do great service. Complaints arising from these causes often resemble consumption; many, not able to find out the symptoms, do not treat the patients in the proper
manner ; foxes' bones and otters' livers appear to be of some use, but the proper remedy has not yet been discovered.

Most inveterate diseases arise from worms, of which the author enumerates eighteen kinds, some resemble imps, others frogs, lobsters, serpents, \&c. An excellent remedy is a certain nut, which has been tried by European doctors, and found efficacious.

The author treats upon fevers at great length; we cannot, however, follow him through all the divisions he makes. The theory of fever is difficult to be understood, and some days must elapse before the physician can find out where to classify it. Their treatment differs widely from ours; cinnamon and fat broths seem to be specifics, and an emetic is greatly recommended. As other diseases are also accompanied by paroxysms, the physician can distinguish the ague from the former by its periodical return. The causes which the writer gives of inflammatory fevers seem to be very trivial. The Yang and Yin-the dual principle, of which the former operatcs, the other is worked upon, is deeply interwoven with human nature; the impotency of either checks the usual functions of the various parts of the body, and gives rise to indisposition.

We have hitherto given only detached sentences, and it is now time to present the reader with the general divisions of pathology. The author classifies them in the following manner :-

1. Violent and mortal fits; these he divides into nine distinct diseases, according to the causes which have induced them; amongst them is wind, cold, heat, moisture, vapour, nutriment, \&c., in this class are also included suicide and accidents.
2. Indispositions occasioned by heat, moisture, dryness, eating and drinking, fatigue, \&c.
3. Fevers and agues, hot, moist, and dry, malignant, cold, \&c.
4. Defects in the respiration, suffocation, short breath, dropsy, cough, \&c.
5. Vomiting of phlegm, pus, green and sour water, obstructions in the throat, \&c.
6. Diseases accompanied by a loss of blood ; bleeding at the nose, tongue, teeth, and ears; vomiting and coughing of blood, \&c.
7. Pains in the heart, head, face, stomach, side, \&c.
8. Paralytic complaints, podagra, acute rheumatism, \&c.
9. Rheumatic complaints, of which the author gives seven different kinds.
10. Mental disorders, insanity, madness, immoderate laughing, fits of rage, fear, trembling, \&c.
11. Sundry diseases; in this class the author includes immoderate perspiration, sleeplessness, somnolency, lassitude, yawning, \&c.
12. Diseases of the viscera, diarrhœa, dysentery, retention of urine, \&c.
13. Ophthalmic diseases; of these the author adduces forty-one different kinds. They are very prevalent throughout the empire; the cause may be sought in the peculiar triangular formation of the Chinese eye, the eyelids frequently becoming inverted, and the lashes acting like a brush upon its surface; also in the want of cleanliness, and in utter ignorance of the structure of the eye.
14. Pains in the ear, nose, tooth, mouth, jawbones, \&c.; also cutaneous diseases, and those of the hair.

Sudden fits are to be attributed to fire; the medicines administered must be warm.

Indispositions in general are difficult to be accounted for, but ought to be trcated according to the above classification.

Respiration is quickened by anger, retarded by joy, lessened by feelings of commiscration, lowered by fear, contracted by cold, expanded by heat, disturbed by alarm, shortened by labour, and impeded by thought.

From thesc changes the author derives the various diseases to which respiration is subject, taking care at the same time, to give the five elements their full share. The principal substance of the liver is wood, of the heart fire, of the lungs metal, of the kidneys water, of the organs of digestion earth. Respiration is to man, what the air and ethereal fluid is to nature. As the least disturbance of the equilibrium leads to a changc in the temperature, what must not be the consequences to human nature! Wise men, therefore, curb their passions, maintain their cquanimity, and preserve themselves from dangerous diseases. When, however, the mischief is alrcady done, the paticnt may be relieved by rousing the passions opposite to those which have given rise to the complaint.

We are quite at a loss for the reasons which induced the author to place dropsy under the defects of respiration. But the view Chinese doctors take of respiration entirely differs from ours. Throughout the human body a vivifying ethereal fluid is transfused, which is called Ke , and resembles the ether of nature. According to the best ancient authors, water enters through the mouth into the body. Besides the natural way of evacuation, it is either absorbed during cold weather by the Ke , or when the weather is hot, it comes forth as perspiration; when grief oppresses the mind, it re-appears in the shape of tears, or is thrown out as saliva. But when the Ke is vitiated, its ejection is obstructed, it accumulates, and gives rise to dropsy. The restoration, thereforc, of the patient, is promoted by the evacuation of the water.

Phlegm is formed by the chyle of the stomach, from want of Ke to refine it; being accumulated in the lungs, it becomes a canal which overflows all parts. To remove it, the greatest care must be bestowed upon strengthening the Ke of the stomach. Coughs, of which there are many kinds, originate in phlegm.

The causes which produce vomiting must be sought in the stomach; ginger is the best remedy. If it is prcceded by pain in the stomach, it is owing to inflammation, but if there is headach and pain all over the body, it indicates flatulency.

The blood contained in the human body is of two kinds, the Yang and Yin (the dual powers, male and female); the Yang is contained in the artcries, and circulates throughout the body; the Yin is in the veins, it nourishes the soul, and moistens the bones and sinews. If men are not careful in their diet and movements, the circulation of the blood may be impeded; a hundred various diseases arise from the bad state of the blood.

Headach arises from rheumatism, or the diseased state of other parts of the body. Face-ach must be ascribed to the prevalence of fire, and the concentration of the Yang in this part.

Complaints of the chest principally arise in summer, when the south wind blows. They are owing to the want of Ke , and the intervention of the Yin ke on the serum.

No disease is perhaps so common among the Chinesc as lumbago ; the poorer classes particularly suffer from it most severely. The way in which Chinese doctors remedy this evil is by putting adhesive plaster, composed of a variety of ingredients, upon the spine.

Liver-complaints the author explains by the liver having become too large and pressing upon the stomach; this again forcing itself upon the thorax, the chest is affected, and pain is produced under the ribs.

Pain in general is entirely the work of fire, the swelling which may accompany it arises from moisture, and both owe their origin to wind and cold, whereby the natural circulation of the blood is arrested. The liver, moreover, extends its influence over the sinews, and sccretes the blood. The Ke of the liver belongs to the Yang, and partakes of the nature of fire, whilst the blood is Yin, and consists of water. When much blood is evacuated, the fire prevails, there is nothing to nourish the sinews, and hence ulcers arise on the back.

Insanity begins with little sleep, want of appetite, foolish imaginations of grandeur and wisdom, a mad laugh, songs and silly
actions. This disease is very seldom to be met with in China. Unhappy persons of that description are generally outcasts from society, and live as beggars and vagabonds. Chinese physicians have recourse to simples, which, if they avail nothing, are at least not noxious. Loss of memory, sudden surprise, fear and trembling, \&c., are classified by the author under the same head.

The heart contains blood, which, when it exudes from the body, becomes sweat; sweat is thus the serum of the heart. Many diseases either arise from the retention of the perspiration, or too profuse sweat, which must be carefully treated.

People may be dumb from two different causes ; first, from defects of the tongue, and, secondly, from a stoppage in the thorax, and loss of the voice by coughing.

During the spring the wood of the liver is invigorated, in autumn metal predominatcs, and affects the wood; in summer fire is the most powerful. Mctal having lost its power, wood and fire predominate, and injure the earth of the stomach, the body becomes heated, the pulse very full; thus the aliment cannot be digested, and dysentery naturally ensues.

The finest particles of the whole body are concentrated in the eye ; it is, therefore, the most subtilc aperture. The pupil is the very essence of the bones, the black of the eye of the sinews. Both the liver, heart, and blood-vessels influence the eye, as may be proved from the classics. When man sleeps, the blood returns to the liver; the liver having received the blood he is able to see; the Ke of the liver having found its way to the eye, it can distinguish the five colours. Inflammation, morbid thickness or opacity, cataract and turbidness, are relieved by medicines taken internally, but not by operations upon the eye itself.

The author fills a whole volume with his directions for healing diseases of the eye. His remedies would astonish the medical faculties in Europe, but as they are so very numerous and complicated in the application, we can find no space for detailing them.

The ear stands in the closest connexion with the lungs, and receives from them its auditory powers, whilst the nose is constantly affected by the liver ; if the liver is diseased, the nose is so likewise. The diseases affecting this organ are very trifling, and easy to be removed.

When the marrow in the bones is deficient, the Yang very bright, the arteries empty, all the various diseases of the teeth commence.

The lips faithfully represent the internal state of the body,
whether white, red, or livid; whilst they announce the perfect state of the body, they are also the harbingers of approaching death.

The tongue is to the apertures what the heart is to the body in general, both stand in intimate connexion, and as long as the former is in good order the latter can distinguish the five tastes. By discriminating the tastes it contributes towards the nourishing of the body, supplies the stomach, and enables it to furnish nourishment to all the viscera. Therefore the aorta of the heart is in the root of the tongue, and the artery of the liver at the side.

In the face all the Yang is concentrated. If the face is red, it is owing to the heart, if it is livid, to the liver, if it is yellow, to the stomach, if white, to the lungs; from these general symptoms the physician may judge of the state of the patient.

The eating too many sweet things occasions pains, and causes the hair to fall off. Bones and sinews cannot exist without each other, the diseases which affect the one do also injure the other.

We pass over in silence the observations upon the hair and skin, the latter of which is said to be influenced by the liver; nor can we dwell upon the remarks regarding poison, which contain nothing striking.

Many of the above sentiments may appear exceedingly crude, but we ought to remember, that the Chinese are an original race, -that their ideas are still as undigested as they came from the first thinkers, and that they have never had the advantage of improving by the discoveries of foreigncrs. Errors in other sciences, if they do not immediately affect human society, may be harmless, but in pathology, blunders endanger the life of the sufferer. We carry drugs to the Chinese, and take some of theirs in exchange, but never yet has an attempt been made to benefit one another by an interchange of medical science. It must not, however, be expected, that the Chinese would grasp with eagerness at our improvements, for this they are too proud; yet we might gradually gain the ascendency over their empiricism, and perform a most benevolent act towards this great nation.

Vaccination has thus been introduced into the empire. Many have been benefited by it, but the great bulk of the nation still remains in ignorance of its salutary effects. As long as the erroneous opinion prevails, that everything ancient is excellent, and far superior to all recent inventions, the nation will remain in the present state of lethargy, and even the most useful sciences will be rejected; but, when this great bar shall be removed, it will keep pace with other countries, and perhaps surpass many.

## II. Pharmacology.

The writer regrets his ignorance of Chinese botany, on account of which he is prevented from giving a better view of the Chinese pharmacopœia. There is scarcely a shrub, leaf, or root, which has not been adopted as an ingredient of medicine. The pharmacy of the Chinese is richer than that of any other nation; a physician has a large choice, and to be always sure, he prescribes a variety of drugs, of which at least one may prove effectual. Though few substances in nature are found to be fit for exhibition in medicine without a previous preparation, they take good care not to adulterate them by a chemical process. Chemistry, as a science, is entirely unknown to them, there is not even a name for it in their language; a simple decoction or powder, or a pill containing twelve or fifteen different ingredients, serve them for all purposes. Their materia medica has an original cast: whether the articles employed in the cure of diseases are more adapted to nature, we shall not decide; but there is at least something deserving the attention of foreigners.

Our author has arranged his remedies according to the diseases of which he has treated in the former part of the work. As a general rule, he suggests that it should first be ascertained to what state the malady has arrived, and that the remedy should be modified accordingly. The external causes of sickness are wind, cold, dryness, and moisture; the internal, the seven passions, (anger, pleasure, sorrow, fear, love, hatred and desire,) and the six affections, (the temper, disposition, natural feelings, natural affection, animal passion, and sexual desire); after having fully investigated the origin, the doctor may then prescribe.

In no country are people in possession of so many nostrums as in China. Great numbers of physicians and apothecaries traverse the country with their secret treasures, expose them to the view of the multitude, and praise their virtues in eloquent language. Others are not content with one or two specifics; they engage to heal so many discases in a given time, for each of which they prescribe an antidote.

The panacea of China is the gin-seng, the root of a plant well known to our botanists, which also grows in America, and is from thence exported to Canton. However numerous may be the virtues we have ascribed to the Peruvian bark, they fall far short of this remedy against all diseases. Though we can attach little belief to the extravagant praises pronounced upon this miraculous root, we
must nevertheless admit, that it possesses some good qualities, and that it is worthy to be tried by our physicians.

The Chinese very much value the bones and horns of certain animals; they preserve the liver of various quadrupeds, use the fins of fishes, and even receive the reptiles into the materia medica. Harts' and rhinoceros' horns, the bones of the tiger and elephant, \&c., are very excellent remedies in extreme weakness, they strengthen and fatten the body, and a dose of tigers' bones is even said to inspire courage.

Aromatics and gums are considered as the best remedies in apoplectic fits, and all violent and sudden diseases. The powers of asafoetida are over-rated; some physicians think it to be an universal medicine, which extirpates the very seeds of a malady.

Opium is used as an anodyne, and also applied in dysentery. Its introduction into this country, the cause of so much woe and misery, is owing to the recommendation of physicians. Few who use it to cxcess, escape the dreadful consequences of a body reduced to a skeleton, and a mind stupefied and blunted; persons addicted to its use present the most wretched sight which a human being can possibly exhibit. In the last stages, no remedy on earth can rescuc the wretch from the grave towards which he is hastening with gigantic strides. The willing victim of vice, he has scarcely a consciousness of his feeble state, but declines insensibly into an awful eternity. Though instances of this kind are very frequent, they strike little terror into the beholder; other wretches inhale the deleterious drug, and find a speedy grave : and a still more numerous band presses forward with equal eagerness to render themselves as unhappy as their predecessors. Everybody abhors the use of this poisonous drug; the government prohibits its importation under severe penalties, but it is nevertheless extensively consumed, and the guardians of the law not only connive at its introduction, but often partake of the fumes themselves. The severe prohibitions have raised a desire of enjoying an illicit pleasure, which few can resist, if they have means of gratifying it. ${ }^{1}$

Mercury, either in the raw state, or as an oxide, is very much used, and more so than any other metal. A Chinaman is very soon salivated, and the effects of mercury upon his constitution are most injurious. Quacks, however, are very free in administering it, and

[^55]though they may relieve a patient, the remedy is worse than the malady itself. Physicians of any note consider it below their dignity to cure venereal diseases. The ravages occasioned by vice are thus frightfully prevalent, and the wretched suffcrers present a most horrible sight.

We have tried to discover whether iron be used in any shape, but have not been successful. The most congenial of all metals to the human body seems to have escaped the notice of the physicians, because they do not know of any process to reduce it into such a shape as to enable the patient to take it.

We must now return to our author. After having given the specific for a disease, he supposes it to take such and such a turn, and gives his prescription accordingly. We shall give a few instances of his mode of arrangement. If a disease commences with a prostration of all strength, and an utter state of apathy, he prescribes thirty-three different herbs, which weigh about seventy-five taëls; one taël with double the quantity of hot water to be taken each time. If the weather be moist, he adds a quantity of ginger, and a variety of pills, when the patient is about to lie down to sleep. By these means the spirits are exciter, and the lungs purified. To promote perspiration, a peculiar mixture of ginger and hemp-seed is added. The physician ought, in his prescription, to attend to the seasons and the temperature of the air, in order to lessen or increase some of the above ingredients. Now this medicine will relieve most patients, if their malady already amounts even to delirium. For strengthening the marrow and bones, he communicates a recipe of twenty ingredients, amongst which we find the gin-seng, bezoarstone, mint, and musk, with sundry pills. To restore the organs of digestion, the anthor recommends pepper, nutmegs, cloves, cinnamon, and a certain bean. For relieving the diseases of the liver, he orders the decoction of twenty-eight different herbs, which are to be taken with various pills, \&c. Such are the contents of eight volumes, wherein the writer has shown the utmost ingenuity in prescribing for all possible cases. These few specimens may suffice; it would be tedious to give more.

The general rule observed by Chinese physicians, in making choice of drugs, is to use the top of the plants, when the disease is in the head, the trunk for the middle parts, and the root for the lower parts. Some, such as gin-seng, rhubarb and musk, \&c., hold a principal rank, and may be used simple; others can only be administered as compounds, or serve as vehicles. The best mode of dividing them is according to their taste, or to their innate
qualities, whether they warm or cool the body. By properly mixing them, even the poisonous qualities of some may be taken away, whilst useless drugs may be rendered effectual by being compounded with others. The way of applying them differs also very widely; some may be taken in decoction, to purge and to promote the circulation of blood; others made up into pills, to expel the wind and open the bowels; others are mixed with liquor, vinegar, and other strong essences; to augment their effect, others are ground to powder, or fried in fat to absorb the bad humours. Maladies accompanied by cold, require warm remedies, and vice versâ ; indigestion may be relieved by emetics; worms, and humours of the abdomen, give way only to poisonous drugs; and bad humours may be expelled by moist medicines. In distempers of the lungs repeat the dose nine times, of the heart seven times, of the spleen five times, of the liver three times, but of the kidney only once.

The remedies found in the animal kingdom may be used with very great effect. An elephant's eye burnt to powder, and mixed with human milk, is a sovereign remedy against the inflammation of the eyes; his bones pulverized, and given in liquor, promote digestion, and relieve all the defects of a disordered stomach; the ivory, preparcd in like manner, is a capital remedy against the diabetes, and the teeth of his mouth against the epilepsy. Camels' hair and fat, taken internally, remove piles; and the flesh of certain crabs, properly prepared, is an antidote against poison.

## III. Pathology.

Mucir has already been said upon this subject under the article Nosology. The discases treated by the author under this head, arise all from cold, and are chronical. After having given a full description of the malady itself, he specifies the remedies, and their application. Before, however, entering upon the subject, he explains the effects of the weather upon the body; in this point he is very prolix: to find a cause for every disorder he exhausts his ingenuity to divide the elements, and to particularize the receptibility of every part of the body.

Every season of the year has its proper pulse, whereby the physician may judge, whether the state of the patient is in accordance with the temperature of the air. The elements constituting the body have, moreover, their respective reigns, which last about two months each, after which another element takes the lead, and influences the body. From these various points diseases ought to be judged and treated.

The knowledge of pathology depends upon a thorough acquaintance with the pulse, a science which occupies all the attention of the Chinese physician. He examines the pulse for hours together, then prescribes, and, certain of success, leaves the house without any intention of returning, unless again called. His very profession depends upon the accuracy with which he explains the causes and the subsequent progress of the disease, the beating of the pulse being the criterion. With the greatest confidence he predicts the course which the disorder is to take, and in how many days the patient will be relieved from his complaint. If none of the viscera be injured, a speedy recovery may be expected with certainty. If the distemper has become inveterate, half the number of patients can only be restored, but if they are in the last stage, it is better to refuse once for all to give them anything, or else to hint at their certain death, and still endeavour to avert it.

By observing the colour of the countenance, whether it be livid, yellow, red, white or black, a second criterion of the state of the patient may be found; for the five viscera have their respective fire colours, the six blood-vessels likewise, and the colour of each part affected is to be found reflected in the countenance. A livid, or rather green, colour like grass, is the forerunner of death. The common livid colour, which belongs to the element wood, indicates the prevalence of the Yin principle; the red colour belongs to the element fire, and announces inflammation, \&c.

The various parts of the body bear relation to the four cardinal points of the compass and to the zenith, which is strictly to be attended to. Thus fire predominates in the heart and viscera, and as fire is concentrated in the south, there exists a relation between the heart and the south. The liver and gall belong to the air or winds, winds come from the east, and therefore both have reference to the east. The kidneys belong to water, water corresponds with the north, and therefore the former also harmonize with the north. The lungs and intestines contain the predominating element metal ; this again tallies with the west, and consequently the former likewise. The spleen and stomach relating to the south, correspond with the zenith. These four cardinal points correspond with the seasons, as has been already observed; thus each of the parts of the body has its peculiar time in which it is the most invigorated, and in its proper state, whilst the others suffer and are affected by not being congenial to the existing season.

Whosoever is conversant with all these matters, which may be considered as incontrovertible maxims transmitted by the ancients,
must, in examining a patient, turn his attention to the eyes, ears, tongue, lips, and in a word, to the whole body. If a patient, for instance, can easily turn himself about, he may be soon cured. If the body be constantly moist, the sufferer recovers ; if, on the contrary, dry and scorched, he will dic.

Having already too long transgressed upon the patience of the reader, we shall make no further extracts. Though much may appear ridiculous, it is to a Chinese an axiom, and he would smile in his turn at the ignorance and presumption of a barbarian, who doubts these things.

Our author treats fully upon catarrh, fevers, stiffness of the neck, excessive vomiting, pain in the chest, and other complaints, which are epidemic in certain seasons. It is difficult to make extracts where each chapter stands in the closest connexion with the whole, and mere scraps must always remain unintelligible. We trust to have given the spirit of this part of his work, and shall now speak of

## IV. Surgery.

The utter aversion of the Chinese to any surgical operation, reduces them to the necessity of using internal remedies or cataplasms in various shapes as substitutes. The moxa and acupunctura, however, do not belong to this class. The latter is performed by silver needles, which are stuck into the flesh and twisted round, whilst the physician compresses the slight wound thus madc. This mode of pricking the body is said to be very efficacious in removing pain, and relieving the patient instantly. As the moxa is well known to our physicians, we have only to remark, that the Chinese apply it far more frequently, and place greater reliance upon it, than our experience would warrant. In desperate cases they have recourse to a kind of tattooing, which can never after be effaced. They likewise use red hot iron for cauterizing old wounds, and removing the raw flesh. Though they possess many caustics, none can be compared to our nitrate of silver.

The author first treats of swellings; these arise either from the temperature, from high-wrought feelings, injuries, or the body being hot and suddenly becoming cold, or from having eaten or drunken something injurious to the body. The blood is thereby arrested in its circulation, and a swelling ensues. After having given very good hints for treating swellings, ulcers, tumours, scrofulous tumours, abscesses, gangrene, ossification, \&c., and given prescriptions how to
remove them, he then particularizes the complaints in each part of the body, external as well as internal.

In the cure of ulcers, surgeons are very deficient, but they excel in radically curing the gangrene by a cataplasm of herbs, which extracts the very roots. We are unable to trace the various modes of treatment, and must be content with a few observations.

If a tumour will not open, but remains hard, the best way is to make an incision in the shape of a cross, wash it well with vinegar and water mixed with flour, and give a few doses of myrrh, olibanum, musk and burnt crabs, and the complaint will disappear. Running sores indicate a debilitated state of the body. The first care, therefore, ought to be to restore the constitution, and then the cure will be very easy. Virulent ulcers must be treated internally as well as externally with five different kinds of poison; inflamed sores can be reduced by cold remedies externally applied. Supposing much blood to flow from these wounds, it is a sure symptom that the blood-vessels are not in good order ; it is especially the liver which occasions this, and the first attention ought, therefore, to be directed towards this part.

The lungs holding a very conspicuous rank amongst the viscera by inhaling the air, they are exposed to many injuries outwardly as well as inwardly; hence the frequency of ulcers in this part. The worst is, that the consequences are not solely confined to the seat of the disease, but spread all over the body ; and it is on this account that death very often follows. Some palliatives with liquorice, almonds, barley, peach-kernels, \&c., do in all such complaints excellent service, yet death is often unavoidable. Poisonous ulcers can easily be dispelled by rhubarb, the kernels of datcs, the pulp of the lotus, \&c.

Herpetic eruptions may be cured by saline lotions. The scrofula arises from various poisons being concentrated; the healing of it is attended with great difficulties. Apply a cataplasm of oysters and rhubarb, give aromatic pills internally, and if the disease will not give way, administer dissolving medicines and onions. If, notwithstanding all precaution, the cure does not advance, it becomes a hopeless case, and ought to be entirely abandoned. Common sores, if not inflamed, may be opened with a needle, and as soon as the blood and pus are pressed out, they will of themselves heal up. Spreading and spongy sores originate in the bad state of the liver, and care ought to be taken to restore this viscus, when they will of themselves dry up.

The dirty habits of the Chinese engender a great many cutaneous
diseases, in the cure of which they do not seem to have made much progress. Itch appears in its most frightful shape, tetters, scabs, and ringworms, often cover the whole body, and leprosy is making dreadful havoc amongst the people. Various remedies are recommended, and many physicians travel through the country to relieve the sufferers, but they appear to succeed ill, for even the rich cannot be freed from these disgusting disorders.

Wounds, if possible, are sewed up with a thread made from the bark of a mulberry-tree, and then dressed with ointments. Of these they have a very great variety, of different colours and qualities. If by a cut in the abdomen the entrails come out, replace them after having oiled your hands, and rub the wounded part with a decoction of gin-seng. Order thin rice in which sheep's kidneys have been boiled, and the patient will recover within ten days. Few surgeons will attempt the cure of a patient who is dangerously wounded, for fear of endangering both their safety and reputation. Even the nearest relations refuse taking them into the house, and though life might still be saved, such poor wretches often expire in the streets.

## V. Diseases of Women and Children.

In this part of the book, the author is more diffuse than in any of the foregoing ; but he treads over the same ground as in his pathology and nosology, only expatiating more fully upon the disorders peculiar to childhood. The prescriptions are so numerous as to be adapted for all possible cases, how difficult soever. In the five last volumes he very ably discusses the disorders of fcmales, and collects the most approved prescriptions for curing them.

This essay being already too long, we cannot enter upon the Chinese thcory of generation, thcir knowledge of midwifery, the treatment of children after their birth, \&c., which are all contained in these volumes. They are great adepts in promoting the fertility of women, whilst they never scruple to procure abortion. The prevalence of this horrible practice may be attributed to the depraved principles of paganism, and the corruption of manners which pervades all ranks.

The intricate science of medicine is, after all, in the estimation of some authors, useless. They pretend to avert all diseases by a proper mode of life, and to cure themselves by a moderate diet and fasting. If all people only followed their advice, the world would need neither physicians nor remcdies ; unhappily, however, mankind is given over to debaucheries, and the science of medicine is a necessary evil.

## Art. X. On the first Translation of the Gospels into Arabic. By Baron Hammer Purgstall.

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\text { Read 15th April, } 1837 .
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Within the last sixteen years, the presses of Tahrán and Cairo have sent forth four works on the biography of Muhammed, which contain a mass of new facts hitherto unknown to all European biographers of the Prophet, and which furnish ample materials for a more characteristic biography than those of Gagnier, Boulainvilliers, Turpin, Savary, Mill, Bush, and the Encyclopedias. Of the four above-named works, the first was published at Tahrán; it forms the second volume of the Haiwat al Kulúb (life of the hearts), 450 lcaves in folio, by Muhammed Báter. Three years after its publication appearcd at Cairo, the Turkish biography of the Prophet, by Waisí وبسيg -and three years later the continuation of it by Nábí زابيـ، who rank both amongst the first writers of the Ottomans.

Bü Nábís biography not reaching further than to the conquest of Mecca, it has been continued by Nazmizáde rolj ; continuation, however, has not yet made its appearance in print; instead of it the commentary of Ibrahim of Haleb was published at Cairo in the month of May, 1833, (Zilhidja, 1248.) This is by far the most important of the four works mentioned, ${ }^{1}$ and from it the following notice of the first Arabic translation of the Gospels is extracted. Three years after Muhammed's having set up his claim to prophecy, and ten years before his emigration (Hijrat ${ }^{2}$ ) from Mecca to Medina, in the year 612, died Warká, the son of Naufel, ورق the cousin of Khadíja, a Christian priest, of whose momentous influence on Muhammed's mind and knowledge, nothing has been recorded by the European biographers of the prophet. He translated the Gospels (or rather the Bible) into Arabic, and this accounts at once for

[^56]Muhammed's deep acquaintance with it, proved by so many passages of the Korán. Muhammed held in the highest esteem this cousin of his most respected wife, and sanctioned this high esteem to all future times by the following tradition: "I have seen a priest in Paradise dressed in green silk, and he was no other than Warká, the son of Naufel." The passage which records him to have translated the Gospels into Arabic is the following : page 53. ورقا فليجّنكك
 "Warká, the son of Naufel, the cousin of Khadíja, had become a Christian at the time of ignorance (before Muhammed), and translated the Gospels from the Hebrew into Arabic."

By the Gospels the Bible must here be understood, not only on account of the Hebrew, but also because the Korán evinces, in a great many passages, a greater acquaintance with the books of the Old Testament, particularly with the Psalms, than with the Gospels; at any rate Warká, the son of Naufel, the cousin of Khadíja, is the first Arabic translator of a part of the Bible.

Art. XI.-Sketch of the Island of Borneo, by G. Windsor Earl, Esq., M. R. A. S. Communicated in a Letler to the Right Hon. Sir Alexander Johnston.

Read 4th February, 1837.
"Although Borneo is so large an island, and although some parts of the coast have been known for many years, very little information has been yet received respecting the interior of the country, and the different people who inhabit it. The Chairman of the Committee of Correspondence, conceiving that a knowledge of this island has become more than ever an object of importance to the British public, in consequence of the trade with China, and with the islands in the Eastern Sea, having been laid open to all British subjects, has taken measures for procuring translations into English of the different works upon the subject written in Dutch; and for collecting all the information relative to Borneo, which can be obtained from those persons who have visited the coasts of that island. Mr. Earl, who has acquircd much knowledge relative to different parts of it, sent a paper to the Society, which was published in the third volume of this Journal; and we have now the pleasure to publish the following paper sent to Sir Alexander Johnston by the same gentleman, who, we hope, will soon have an opportunity of obtaining still further information upon the subject, by joining the expedition which is about to sail for the purpose of making a survey of the Eastern Seas; and which will afford him the means of completing those inquiries which he has already carried on, as appear by the papers we have published, with so much zeal and intelligence."

## Mr. Earl's Paper.

I hasten to draw up a statement of the information I have been enabled to collect concerning the great island of Borneo, and I regret being unable to give more than a very meagre account of a country, which, besides possessing a soil which vies in richness with that of any other island in the Indian Archipelago, contains extensive veins of precious metals close under the surface of the earth,
alone sufficient to render it of the utmost importance. The notices contained in the following pages are partly the results of observations made during a personal visit to the western part of the island; partly from the notes of a gentleman who visited the interior from the east coast; and partly from information collected from the commanders of vessels, and others, Europeans and natives, who have visited the parts in question.

Commencing with the western part of Borneo, which is the point nearest to the British settlements in the Straits of Malacca, we find that the rich mineral productions have attracted the cupidity of foreigners ; the Malays and Chinese having established themselves on the coast and on the shores of the larger rivers, the Dyaks, the aboriginal inhabitants, having retired before them into the interior. The period of their arrival on the Island cannot be ascertained, but the Malays must have been firmly established when the Chinese first immigrated, for the latter acknowledge that the country in which they are settled by right belongs to the former. The Malays, being a maritime people, did not occupy themselves in working the mines; but, having fixed themselves near the mouths of the three great rivers of Pontianak, Sambas, and Succadana, were contented with the gold and diamonds they procured by barter from the aborigines, chiefly employing their time in piratical cruizes against the natives of other parts of the archipelago. The Chinese, on the contrary, being extrcmely partial to mining spcculations, established themselves in the parts where gold and diamonds could most readily be procured. They are now principally congregated in the district of Montradok, which lies between the rivers of Sambas and Pontianak. This district is about forty miles wide, and extends from the sea-coast between sixty and seventy miles into the interior.

The rivers of Sambas and Pontianak are of considerable depth, and afford great facility for communication with the interior. They are both supposed to take their rise in the very centre of the island. Sambas river is the largest on the west coast of the island. The entrance is about a mile and a half wide, the depth being nearly twenty feet at high-water spring-tides, but immediately inside the heads, the width of the river increases to two miles and a half. It has been ascended by the Dutch a considerable distance, probably eighty or ninety miles, and nothing was found that would obstruct its navigation by vessels of moderate burden. It is said by the Malays that canoes can ascend it to within two days' journey of Borneo Proper.

The Pontianak river, the mouth of which is about ninety miles
to the southward of Sambas, is inferior in point of size to the latter, but the town situated near its mouth is of more importance than Sambas, as it is the chief residency of the Dutch on the west coast. In addition to the two settlements already mentioned, the Dutch have a third at Landak, a town on the banks of one of the lesser branches of the Pontianak river, about seventy miles from the sea, near which are the most productive diamond-mines.

In 1823, the southern branch of this river was ascended 230 miles, by an exploring party from Pontianak, but no account of the expedition has been made public, and the only information I could procure concerning it, was from one of the gentlemen at Sambas, who was intimately acquainted with the person who conducted it. At the point to which they ascended, the river was found to open out into an extensive lake, twenty-five miles in length, possessing a depth exceeding three fathoms. Two islands were situated near the centre, one of which was named Van Der Capellen, after the governor of Dutch India.

Several Dyak tribes were settled on its shores, but I could not ascertain whether they possessed vessels of a superior description to those used by the tribes who inhabit the banks of the rivers. I suspect that the Dutch avoided having any intercourse with them.

The Danau Malayu, as the lake is called, was estimated at only 100 feet above the level of the sea; but as a much greater elevation would be necessary to give the stream of the river the force that it possesses, I think they must have calculated only the height of the falls which they passed in the ascent, one of which was thirty feet high.

The latitude of the lake was estimated at $1^{\circ} 5^{\prime} \mathrm{N}$., and its distance from the sea, in a direct line, at 140 miles.

The west coast of Borneo was ceded to the Dutch about the year 1780 , by the king of Bantam, in Java, who either had, or professed to have, a right to it, and an expedition was fitted out the same year by the Batavian government to take possession of the territory. Succadana, then the most important town on the west coast of Borneo, was the spot fixed on for the settlement, but the native chief disallowed the right of the king of Bantam, and refused to admit the Dutch, who immediately attacked the town, and destroyed it. They then established factories at Pontianak, and at Mompava, a town on the coast of the district inhabited by the Chinese; but both the latter and the Malays were so opposed to them, that the establishments were abandoned as unproductive, after a trial of thirteen years, during which time numbers of lives were lost; and, what was considered of more importance, large sums of money were expended.

In 1823, the Dutch again cstablished themselves at Pontianak, and purchased the monopoly of the diamond-mines from the Panambahan, for 50,000 dollars. The stones below four carats were to be the property of the miners, and those above that were to be sold to the Dutch, at twenty per cent. below the market price. In 1823 and 1824, diamonds, amounting to 2290 carats, were rcceived by the government, which cost 33,000 guilders, and were sold for 52,000 , giving a profit of 19,000 guilders ( $1,583 l$.), rather more than fifteen per cent. on the money paid to the Panambahan. Even this small profit decreased, either from the miners not working with zeal, or from their being enabled to embezzle the larger stones.

The Dutch, finding that the speculation was a losing one, turned their attention towards the Chinese, in the hope of wringing from them some of the produce of their labours. The territory occupied by the latter had not richer mines than were contained in other parts of the country, but Chinese industry rendered them more productive. However, the Dutch sent a body of troops against the Chinese : the latter could not cope with the Europeans in the field, but they harassed them by cutting off the supplies, and poisoning the wells, until at last the Dutch troops retreated.

Another plan was now pursucd by the Hollanders. A sum of money was paid to the Sultan of Sambas, for permission to form a settlement there, and the intermediate coast has ever sincc been blockaded by gun-boats, so that the Chinese can neither leave the country, nor have any communication with foreign parts, except through Pontianak or Sambas. Enormous duties are levied on exports and imports, and a tax of sixty guilders is imposed on cvery man that leaves the country.

The Dutch also acquire a revenue by farming to individuals the exclusive privilege of retailing opium, betel, arrack, pork, indeed almost every necessary of life. The sale of salt is entirely in the hands of government. It is brought from Java, and deposited in large store-houses, and sold to the natives at a price amounting to 700 per cent. on its intrinsic value.

With respect to the supply of salt, the interior of Borneo is similarly situated to the inland parts of Africa. It is obtained from the sea-coast, and the further it is taken into the country, the more it increases in price. At a place 200 miles from the mouth of the Sambas river, a measure of salt is exchanged for twenty times the quantity of rice. On the northern coast, where the Dyaks are rather more civilized than the people near Sambas, cakes of salt are used in lieu of coin, as a medium of exchange.

The illiberal system pursued by the Dutch has not effected an improvement in the revenue department, an annual loss being sustained of from 40,000 to 50,000 guilders. The commerce is in a great measure destroyed. About fifteen Junks from China came annually to the coast before these restrictions were imposed, but the number is now reduced to four or five.
; The gold and diamond mines are easily wrought, and with European enterprise and machinery, their produce would be immense. The veins of ore are not in the hills, but in the low country, and are seldom more, and often much less, than thirteen feet below the surface. The miners use simple spades and mattocks for digging out the ore, and clear the gold and diamonds from the earth by means of a strong stream of water turned through a large wooden trough. The particles of gold are generally very small, but large pieces are occasionally found. The Sultan of Sambas has in his possession a piece which is said to weigh more than twelve and a half bunkals, about eighteen ounces. A diamond is seldom found of more than thirty carats. The famous Matan diamond, which is almost the only property left to the Sultan of Succadana, is 367 carats. I have never seen it, but have heard from those who have examined it, that it is not a true stone: it is uncut.

Pontianak, the chief settlement of the Dutch on the west coast is distant from Batavia 420, from Singapore 340, and from Canton 1400 geographical miles. The distance between Pontianak and Batavia is not actually more than eighty miles greater than that between Pontianak and Singapore; but as the monsoons in the China Sea blow from north-east and south-west, a ship can always make the voyage from Singapore and back with a fair wind; so that five voyages can be made in the same time that would be required to make one to and from Batavia; for in the latter case a ship would always have the monsoon against her one part of the passage.

The exports of the west coast of Borneo are gold, diamonds, bezoar-stones, and small quantities of wax and rattans. Although part of the territory occupied by the Chinese is in a high state of cultivation, nothing is grown for exportation. Pcpper was formerly produced, but since the restrictions on commerce, the Chinese will grow nothing except for their own consumption. Iron is obtained in small quantities from the interior: it is sometimes exported to Java, and other countries in the Archipelago, where it is much valued for the manufacture of krisses (daggers). The iron is brought frum the interior in bundles, each containing ten small pieces. Five of the bundles are worth three dollars.

Calicoes, teas, and all articles of Chinese produce and manufacture, are brought from Canton and Amoy; rice and salt from Java; and opium and piece-goods from Singapore.

Proceeding northwards from Sambas, the first place of sufficient importance to attract attention, is Serawak. Here the country is mountainous, and the Dyaks, instead of being driven into the interior, occupy the sea-coast. The town is situated in a bay, on the east side of Point Api, about sixty miles to the southward of the Sambas River.

This part, indeed the whole N. W. coast, is claimed by the Rájá of Borneo Proper. There is but a handful of Malays at Serawak (perhaps forty), but the Dyaks are so easily governed, that a small number of foreigners is sufficient to keep a large native tribe in the most complete subjection. The mountains in the vicinity contain inexhaustible mines of antimony. The ore is brought down by the Dyaks, who receive in return small presents of red calico, beads, brass-wire, and tobacco, and is taken by the Malays in Bornean and Sambas prahus, to Singapore, where it is eagerly purchased and transmitted in its crude state to Europe. The price paid for the ore at Singapore, is from one to two dollars a picul (1331b.), while the trifles given to the Dyaks for fifty piculs, are not valued at more than five dollars. I cannot discover that any European has yet visited Serawak.

Two days' sail to the N.W. is Scrassan, where the Dyaks are supposed to be in greater force than in any other part of the coast.

Many of the creeks here are occasionally occupied by Lanun pirates, from Mindanao, who are sometimes at war with the Dyaks; but they frequently join forces, in which case the Dyaks claim the human heads and iron, leaving the rest of the plunder to the Lanuns.

The Badjús, a kind of sea-gypsies, who are supposed to have come originally from the vicinity of Singapore, are also to be met with here. They İive entirely in their little boats, and sometimes employ themselves in making salt from sea-water, which is eagerly purchased by the Dyaks.

The N.W. coast is so little known, that even the points are not accurately laid down in the charts, except those in the vicinity of Borneo Proper. The latter was once a place of great importance, but the system of piracy connived at by the Muhammedan government has driven away the European, and a great part of the Chinese trade. After being neglected by the British for many years, two ships were sent here from Singapore in 1834, and they procured considerable quantities of gold-dust, pepper, and camphor. The pepper is entirely
cultivated by the Chinese, and the greater part of the produce is sent to Canton and Arnoy, in the Chinese junks which annually visit the port. Borneo Proper also exports cloves, bark, rattans, dammer, black-wood (for furniture, \&c.), and tortoise-shell. The town is of considerable extent, nearly all the houses being built upon floats on the river.

Proceeding from the town of Borneo Proper to the N. E., we come to the northern part of the Island, which was ceded to the English by the Súlus, and is still considercd by many natives as the property of the British Government. The climate and soil are spoken of by the Bugis, who are well acquainted with this port, as superior to any in Borneo. Near here is the island of Balambangan, where the British settlement was unfortunately formed, in preference to the main land. It was established for the purpose of carrying on a contraband trade with the spice islands, and also with a view to induce the Dyaks to undertake the cultivation of pepper. The aborigines are here very numerous, and are further advanced in civilization than the Dyaks of the west and north-west coasts.

The mouths of the rivers are occupied by the Malays, or rather Moors, who look on the Dyaks as a property, and endeavour as much as possible to prevent their having communication with foreigners. In 1834, I met at Singapore three Bugis chiefs who had touched here on their voyage from Súlu. They informed me that a numerous body of Cochin-Chinese had settled there. Should this be the case (and I have no reason to doubt the veracity of my informants), the country will have an industrious population, which will bc of the greatest value should the British ever again colonize the part in question. It will perhaps be remembercd that some years ago, the Jesuits of the Propaganda Mission in Cochin-China, having been detected in treasonable practices against the state, were expelled the country. The native Christians then rebelled, but were put down by the king's forces, when many of the former emigrated.

I am the more inclined to believe the statcment of my Bugis friends, from the fact that numbers of Cochin-Chinese are settled in the neighbouring island of Palawan, and from the position of the north point of Borneo, it being so situated, that the voyage to and from Cochin-China can be made with facility in all monsoons, also from the numbers of well-sheltered harbours and navigable rivers; from the fertility of the soil, and the absence of all likelihood of determined resistance from the aborigines, there is not a spot in the Archipelago better adapted to their purpose.

As the sea-coast on the west side of the island is inhabited by

Malays, so is that of the east by the enterprising Bugis tribes of Celebes. Of the coast from Malludo Bay to Coti, which comprises nearly eight degrees of latitude, little further is known than that it contains many considerable rivers. The productions of the country are chicfly taken to Coti and Passier, the principal ports on the west coast, whence they are exported to Singapore. In the year 1827, Mr. Dalton, a mercantile gentleman from Singapore, went to Coti in a Bugis prahu, and penetrated far into the interior, to the country of the Dyaks, where he remained trading fifteen months. Unfortunately he died soon after his return to Singapore, and the notes he has left are sadly deficient in geographical information, but they contain voluminous accounts of the manners and customs of the Dyaks. It appears that he ascended the Coti river 600 miles, but in which direction is not mentioned. He was treated well, one of the chiefs having adopted him as a brother. Were not the labits of the Dyaks of the west coast well known, it would be almost impossible to believe that human beings could be so far degraded below the level of the brute creation as he describes them. The sole employnent of the chiefs appears to be in undertaking expeditions into the interior, for the purpose of surprising and slaughtering the inhabitants of whole villages, solely that thcir heads may be procured to deck the habitations of the murdercrs. Hunting-parties are formed to destroy the people belonging to the wilder tribes that inhabit the woods. A man cannot marry until he has procured a human head, and he that has several, may be distinguished by his proud and lofty bearing, for it constitutes his patent of nobility. From this it may be thought that all attempts to improve them would be hopeless; but on the contrary, the horrible nature of thcir mode of life renders them more willing to adopt milder customs. The Moslems never found more ready converts. On the west coast I saw both the wild and the tame Dyaks, and thought it hardly possible that they could be the same race of people. Those in the vicinity of the Chinese settlement had totally abandoned their horrid customs, and were milder in conduct and disposition than any of the natives of the Archipelago I had hitherto seen. How the custom of wholesale murdering originated, it is impossible to say; but the Dyaks that exist at present have been brought up to consider the destroying of a fellow-creature as the most meritorious action that they can perform.

From the account of Mr. Dalton, the Dyak population in the vicinity of Coti must be considerable. Therc are three head chiefs, one of whom has fifty, another seventy, and a third 150 minor chiefs
under nim, each of whom is supposed to have about 1,000 individuals under his rule. This population will appear immense, when the system of human sacrifice is considered, but it must be remembered, that these rarely attack each other, their murderous excursions being undertaken against the more distant tribes.

Single missionaries would be of little avail in weaning them from thicir evil practices, as it is apparently by example, and not by precept, that they can be permanently benefited. From the Dutch settlements on the west and south coasts, civilization might be disseminated far into the interior of the country, but unfortunately the governments there are solely occupied in enforcing their commercial monopolies.

A mission similar to those of the Jesuits among the natives of South America (to whom the Dyaks bear an extraordinary resemblance in appearance, habits, disposition, and even in weapons), would be likely in a few years to put an entire stop to the horrid practices which now obtain. It would not be those only in the immediate vicinity of the missions that would be benefited, but the more distant tribes would soon follow the good example. Instead of missions similar to those of the Jesuits, I should have said, on a similar system,-that is, by establishing the missionaries in threes and fours at the chief villages of the various tribes.

The town of Coti, or Semerinden, is situated sixty miles up a large river, at the mouth of which are numerous small islands, which afford a retreat for pirates. The town is chiefly inhabited by Rugis, many of whom annually proceed to Singapore to dispose of the produce of the country, gold-dust, wax, \&c., and bring back articles for home consumption, or for exportation to the more eastern parts of the Archipelago. Above Coti are the Dyak towns of Tongarron, Mapao, and Woaho, the inhabitants of which, to the estimated amount of 270,000 , are nominally under the control of the Bugis of Coti, who are enabled to keep them in awe by their knowledge of the use of fire-arms, of which the Dyaks have the greatest dread.

Mr. Dalton resided during his stay chiefly at Tongarron, the largest Dyak town on the banks of the river, which, from the estimated length of the reaches of the river, he considers to be situated 200 miles N.W. $\frac{1}{2}$-N. from the mouth.

The following positions which he has assigned to the various towns on the banks of the river, would probably be more correct, were one-third of their distance from the mouth of the river deducted, as an over-estimation of the lengths of the reaches.


From Tongarron, the river is stated to run north thirty miles, N.W. thirty miles, then west, and afterwards W.S.W. Mapao, a large town, is said to be betwcen 300 and 400 miles further up the river, and that a fast canoe, aided by the current, can descend from Mapao to Tongarron in twenty hours. The river must be extremely tortuous in its course, for were a straight line carried out to the N.W. 300 miles from Tongarron, it would enter the China Sea.

The mouth of the Coti river is estimated by Mr. Dalton to be in latitude $1^{\circ} 2^{\prime} \mathrm{S}$. ; longitude $117^{\circ} \mathrm{E}$.

In the year 1825, an expedition was sent by the Dutch government to explore the Coti river, and to endeavour to traverse the island to its opposite coast, the unfortunate results of which tend to prove, that in countries like this, politics should be entirely unconnected with exploring expeditions.

Major Müller, a gentleman who had been employed in the same capacity on the opposite coast, was placed at the head of the expedition, the remainder of the party consisting of twenty-four Javanese soldiers. On arriving at Coti, he prevailcd on the Sultan to permit the Dutch to settle there, and to monopolize the duties, for the annual payment of 80,000 guilders. When this compact came to the knowledge of the Pangerans, they remonstrated so strongly with the Sultan, that he regretted having made the agreement, and, to prevent its being acted upon, he determined to have Major Müller and his party destroyed, as then no evidence of the fact would remain. One of the Bugis Pangerans was, therefore, sent with a strong party as a guide, who, with the assistance of the Dyak boatmen, treacherously murdered the greater number, a few of the Javanese alone escaping.

The extraordinary temper of the Dyak swords was here put to the test, and it is said that some of the muskets of the Javanese soldiers, with which the latter cndeavoured to defend themselves, were cut in two by a single blow. The iron which is found in the interior of the island must either be of an excellent quality, or the Dyaks have discovered a method of tempering it, which sets at defiance the competition of more civilized nations. This is probably one of the relics of a former state of civilization, which has been remembered from the intimate connexion it has with some of their present customs.

About 100 miles to the southward of Coti is a large river, on the
banks of which, about sixty miles from the mouth, is the town of Passier. This place had formerly considerable tradc, being a depot for the spices and other produce of the islands to the eastward; but since the settlement of Singapore, its commerce has decreased.

In 1772 the British were about establishing a factory here, but some violent disturbances which took place in the state about that time detcrred them. The dissolute habits of the chiefs have caused this place to become a den of infamy, and murders are daily committed in the strcets. Neither Passier nor Coti have been visited by an European ship for many years.

Preceeding to the southward there is no place of sufficient importance to attract attention, until we arrive at Pulo Laut, an island of considerable size, divided from Borneo by a narrow strait. Its shores are inhabited by the most ferocious pirates in the Archipelago, who are the terror of the navigators of these seas. During the south-cast monsoon, they cruize with their prahus near the coasts of Java, and of the more civilized islands; were they not fortunately as idle and unenterprising as they are ferocious, the commerce of the adjacent islands would almost be put a stop to by them.

Passing round the southern point of Pulo Laut, the south coast of Borneo commences. A range of high mountains lines the shore from this to Point Sclatan, or South Point, a distance of ninety miles. From Point Selatan the coast line trends to the northward, to the mouth of the river Banjar Massin, one of the largest yet known on the island. The town of the same name is situated about twenty miles from the mouth of the river, on the left bank. It was founded by the Javanese many years before the arrival of Europcans in the Archipelago, but since then there has been such an influx of Bugis and other foreign scttlers, that the inhabitants have lost all resemblance to the people of Java, although a constant correspondence has been kept up with that island.

In 1747 a factory was established here by the Dutch, which was continued until 1809, when the Hollanders, finding that the settlement did not afford more revenue than was sufficient to pay the expenses, abandoned the place to the native chief, who paid 50,000 rix-dollars for the forts and government buildings.

When the British took possession of Java in 1811, Banjar Massin was much reduced in importance. The Rájá having invited the British to settle there, a factory was established, which was given over to the Dutch on the restoration of Java, and is continued by them until the present day.

The principal part of the commerce is with Java. The exports
are gold, diamonds, pepper, indeed, precisely the samc as those of Borneo Proper.

The banks of the rivers abound in rattans of the best description, which are exported in large quantities to Java, where they are exchanged for ricc and calicoes. A considerable trade is carried on between Banjar Massin and Singapore, but it is much discouraged by the Dutch authorities.

The coast between this place and Succadana is understood to possess no large rivers, but there are numerous small towns, inhabited chicfly by Bugis, which are fast rising in importance, as the establishment of Singapore, where the utmost freedom of commerce is enjoyed, has given a spur to the trade of this and every other port in the Archipelago. Cota Ringin, a town about 100 miles to the eastward of Tanjong Sambar, the S.W. point of Borneo, is second in importance to Banjar Massin.

The relics of a people who must have been much furtlier advanced in civilization than the Dyaks, are to be met with in various parts of the island. Those near Banjar Massin are evidently Hindu remains, and their existence may be accounted for by the fact, that a colony of Hindus from Java was established there; but I cannot help thinking, that those found in the wilder parts of the island are even more ancient. From what I could learn, the latter consist of tumuli, in which are found curiously-shaped earthen jars, and as these are considered by the Dyaks as being connected with the ashes of their forefathers, the tumuli are probably graves.
In the maps of the Island of Borneo, a range of high mountains is represented as traversing the interior of the island from northeast to south-west, but I have never seen them, nor have I been able to discover any evidence that may tend to prove their exi stence; indced, I have no doubt, that when the island is better known, these will be erased from the chart, and probably a chain of lakes will then occupy their place. Therc is nothing in the geological formation of the hills in Borneo that would lead to the supposition that the ranges of mountains would there take a different direction from those in the islands to the westward. With the exception of the mountains in Java, and in the islands to the eastward of it, which are of volcanic origin, all the ranges yct discovered in the western parts of the Indian Archipelago, and in the intertropical parts of Eastern Asia, extend from north-west to south-cast ; and as the hills on the west and north-west coasts, and perhaps also those in the interior of the island, are of the same formation (primi-
tive granite), it appears improbable that they should take another direction.

One of the Eastern Asiatic ranges, after cxtending along the S.W. coast of Sumatra, terminates at its S.E. point. Another runs along the Malay peninsula, is lost for a time, but appears again in the high peak of Lingin, and terminates in Banca and Billiton; and a branch from this separates at Pulo Timoan, on the east coast of the peninsula, and ends at Carimata, in the strait between Billiton and Borneo. Two ranges traverse Cambodia and Cochin-China in the same direction, and these will be found to extend to, and, perhaps, to traverse Borneo. Between the Cambodian range and the mountains at Serawak, on the north-west extremity of Borneo, the Natunas islands and Pulo Condor form the connecting link; and as the Serawak hills run to the south-east, the range is probably continued, cither by a connected line, or by isolated mounts, until it terminates in the Gunung Ratos, near Cape Selatan.

All these ranges abound in metals, which is not the case in Java, where the mountains take another direction.

Mr. Dalton, in his papers, mentions no range of mountains in the interior of the island, and, had they existed, they would certainly not have been allowed to pass without some allusion to them. The streams of the rivers, however, are so swift, and their courses are so long, that the country in which they take their rise must be some thousand feet above the level of the sea.

As geographical research is extending to every part of the globe, Borneo, which certainly deserves the name of El Dorado better than any country hitherto known, may not be entirely neglected. The numerous large rivers afford easy communication with the innermost recesses of the country, and, unlike the Quorra and other large rivers in Africa, they rarely have sand-banks or rapids to arrest the progress of voyagers. Very little fear is to be entertaincd of the hostility of the Dyaks, for they are so terrified at fire-arms, that they have been known to run for miles on hearing the report of a gun.

Were a free trade at any future time to be opened with the Aborigines, it would afford an annually-increasing market for many articles of British produce and manufacture. Those now in demand are calicoes, beads, brass wire, and iron for agricultural instruments.

Regretting that the information I have been enabled to collect is so inadequate to the importance of the subject,

I have the honour, \&c., \&c.

# Art. XII.-On the Cause of the external Pattern, or Watering of the Damascus Sword-Blades, by Henry Wilkinson, Esq. 

Read April 1st, 1837.

IT is well known that Damascus was formerly celebrated all over the world for its manufacture of sword-blades, and it is recorded, that when Timúr Lang conquered Syria, in the beginning of the fourteenth century, he carried off all the manufacturers of steel into Persia; since which period, the fabrication of arms has declined at Damascus, and the successors of those workmen, being dispersed over the East, are said either to have lost the secret, or ceased to make blades of more than ordinary goodness. We must, however, first divest ourselves of all prejudice in favour of the exaggerated reports of their qualities, and remember, that at the time when the natives of the East were well acquainted with the art of working in iron and steel, we, and indeed all Europe, appear to have been comparatively in a state of perfect ignorance; the ancient swords of Damascus, therefore, when opposed to those of other countries, were probably found to be infinitely superior in temper and quality; which, combined with their great external beauty, stamped them for ages with so high a character for excellence, that they are even now handed down as heir-looms by Eastern princes to their posterity. The extraordinary prices ${ }^{1}$ that have been offered and obtained for them, sufficiently attest the estimation in which they were held, which is certainly not warranted in the present day, when swords of equal, or supcrior quality, might be manufactured at one-twentieth of the expense. In addition to the foregoing observations, the strength and great dextcrity of the swordsmen must be taken into consideration, and much of the apparent superiority of these blades may be undoubtedly ascribed to this cause.

The attempt to imitate them has, however, occupied the attention of philosophers and manufacturers in various countries, and at different periods; but these attempts have been mostly directed to produce the external appearance, rather than to attain any superior quality, for which the original swords were famed, and the explanation of the true cause of the watering, or Jowher, (which, in my

[^57]opinion, has never been successfully imitated,) is still a,desideratum. With this view I have attentively pursucd the subject for screral years, and finally came to the conclusion that the natives of the East are either perfectly ignorant of the cause themselves, or, finding their labours so highly appreciated, have mystified the process as much as possible, in order to avoid the discovery of having no secret to keep.

With respect to the various attempts at imitation, the least ingenious one is certainly that of etching, or engraving, a blade of common steel, merely to dcceive the purchaser. Amongst the numerous failures, we may enumerate those of Messrs. Nicholson, O'Reilly, Wilde, and others in England, as well as that of Monsicur Clouct, in France, whose treatise entitled, "Art de fabriquer les Lames figurees, dites Lames de Damas," does not contain any method capable either of imitating the figure, or the boasted qualities of the real blades; which is clearly demonstrated by Signor Crivelli, in a memorial published at Milan, in 1821, "Sull" Arte di fabricare le Sciabole di Damasco," in which the author considers that he has discovered the great secret; but, although his method is extremely ingenious, and, in my opinion, calculated to produce swords of great beauty, and cqual to any ever made at Damascus, yet I think I may be able to prove that his conclusions are crroncous, and that he has mistaken a natural appearance for an artificial one. Another method, adopted in ignorance of the true cause, or mercly for the sake of ornament, is not uncommonly met with in Georgian swords and daggers, and in those of Russia, and other countries, forming a central line along the bladc, and made by a process similar to that employed for the manufacture of gun-barrels in India, and now well known in Europe; consisting of alternate laminæ of iron and steel, twisted in a spiral direction, and welded together; this arrangement is, however, totally different to the true Damascus, and wholly unfit for the edge of any cutting instrument, being incapable of producing uniformity of temper. A few cclebrated swords made by Goork of Taflis, almost all of which are at present in the possession of Kings, arc made of Georgian stcel, the ore being obtaincd from the Siberian mines; they have a broad band of this kind of artificial Damascus near the back of the blade. One of them I have lately examined, and do not consider it superior to those of our own general make, in respect to its useful qualities; the band being mercly an ornamental introduction.

The conviction in my own mind that secrets of importance in manufacturcs can rarcly be kept for centuries, induced me to seek
for the cause in the material employed; and I think that in China, and other places, where the natives excel in the production of any particular article of commerce, we must generally attribute it to the quality of the material, and the method of manipulation, rather than to the superior skill and knowledge of the workmen. Unavoidable results are often obtained, depending on circumstances unknown to themselves, and, therefore, casily preserved from the curiosity of others.

The Jowher, or watering, of the genuinc Damascus sabres, I conceive to have been originally produced by two principal causes; first, the nature of the iron-ore; secondly, the method of converting it into steel. The latter differs in various provinces of India, but is essentially the same, as I find by the MSS. of Dr. Moorcroft, and Major James Franklin, and also by other documents. ${ }^{1}$ The furnace is of a rude description, bcing composed of stones and mud, or clay; the iron-ore is reduced to a coarse powder ; the furnace being filled with charcoal, ${ }^{2}$ the fire is urged by bellows until no moisture is given out; a small basketful of the ore is then poured in at the top, and a larger basketful of charcoal, and so on alternately. The scoria begins to run in about an hour; the bcllows are incessantly worked by men relieving cach other, and in about twelve hours the process is finishcd. The crude iron thus obtained has never been really melted, but falls by its weight to the bottom of the furnace, where the grains agglutinate : in this state it is often malleable. The wall of the furnace is broken down-the red-hot mass dragged out, and divided into pieces of one or two pounds' weight. To convert it into steel, cach piecc is put into a crucible, witli a handful of dried branches, ${ }^{3}$ and the mouth is closed up with mud : the crucibles are arranged in a circle, in a hole dug in the ground, the cavity is filled with charcoal, and a strong heat is kept up for six hours: the crucibles are then sprinkled with water to
${ }^{1}$ In Vol. i., p. 245, of the "Journal of the Asiatic Society of Bengal," there are some interesting particulars relative to the native manufacture of steel in Southern India, extracted from the MS. Journals of the late Dr. Voysey; and at page 253 of the same Journal, some observations are made on the Salcm Ironworks. Dr. Heyne has published his "Tracts on India," in which he fully describes the method of manufacturing iron and stecl in various parts of India. The MSS. of Dr. Moorcroft and Major James Franklin are in the library at the East India House.
${ }^{2}$ Bamboo-charcoal is said to be preferred, probably in consequence of the quantity of silica it contains, which acts as a flux.
${ }^{3}$ The dried branches of the Cassia auriculata, and the fresh leaves of the Convolvulus laurifolia, are employed.-Dr. Heyne,
cool them, and the steel is found at the bottom; but some of the crucibles contain part iron and part steel, and others have cracked and allowed the metal to flow out. The cakes of steel are called wootz: they differ materially in quality, according to the nature of the ore, but are generally very good steel, ${ }^{1}$ and arc sent into Persia and Turkey, where such as are suitable for the purpose arc manufactured into sword-blades, razors, and other articles of cutlery.

This is the kind of stcel that has always been employed for those blades so celebrated for their beauty, and I consider that it would be as impossible to forge a sword-blade out of some of these materials, when properly selected, without obtaining the true Damascus figurc, as it would be to imitate the pattern by any contortions of iron or steel artificially. These cakes of steel are evidently crystallized, and the future pattern of the sword-blades depends on the size and arrangement of the crystals, modified by so many circumstances, that it is not surprising the proper kind of steel for this purpose should be so rare, or that the secret should have been supposed to be lost. Some of the causes which influence the arrangement, are,-minute portions of the carths, or their metallic bases, entering into chemical combination with the steel; the alloy of other metals contained in the ore; the quantity of carbon absorbed by the iron in its conversion; the weight of metal fused at one time; the quickness or slowness of the cooling, which in all cases affects the laws of crystallization, and in some cases even alters the properties of the crystals themselves; above all, it is highly probable that clectrical action may induce a peculiar arrangement of the crystalline structure according to the temperature; but, from whatercr cause or combination of circumstances it may arise, it may be rendered self-evident, that the figure or pattern, so long sought after, exists in the cakes of wootz, or native steel of India, and only requires to be produced by the action of diluted acids. ${ }^{2}$.

[^58]In the examination of various specimens of wootz, I found one large cake of about two and a half pounds' weight, from Cutch, which, on cutting and working, not only furnished excellent steel, capable of being hardened and tempered without much difficulty, but exhibited the Damascus figure, both in the cake itself, and when drawn out by forging into a bar; I also found that this bar could be doubled down on itself four times while red-hot, and then welded perfectly together. Several specimens from Salem, weighing about one pound each, gave only slight indications of a pattern, the crystals being very small, and the steel inferior in quality. Now, it is a singular coincidence, that the trade between Cutch and Damascus was formerly direct; it is therefore highly probable, that the ancient blades were originally made of this steel, and consequently, by mere accidental circumstances, presented a beautiful figure; whereas, if the trade to Damascus had been from any other part of India, where the steel was prepared from a different kind of ore, or in smaller cakes, or in fact, did not contain the pattern within itself, the Syrian workmen might never have become more celebrated for the manufacure of their blades than any other Eastern artisans. I find also that there are two distinct patterns in the Cutch steel I have examined; one can be produced in a few minutes by the action of dilute nitric and sulphuric acids, which show the gencral arrangement of the crystals in the cake, and their elongation into lines when drawn into a bar; but there is a secondary pattern more complicated, resembling the dark lines in the genuine Damascus, which is much more difficult to bring out, and requires the Oriental methods, or the long-continucd action of light and air, to render it perfectly evident; this appears to result from the lines formed by the currents of the fluid mass of metal while cooling, which currents are well known to exist in all fluids when acted upon by increase or decrease of temperature; in the present instance, that portion of the melted steel which is in contact with the sides of the crucible, is cooled faster than the centre, and falls by its superior density, while fresh portions flowing from the centre to the sides, keep up a continuous circulation until the whole mass solidifics; hence arises the radiatcd appearance on the surface of these cakes of wootz, and hence results the more elaborate pattern, or watcring, wholly independent of that formed by the elongation of the crystals themselves.

[^59]In all our manufacturing processes, immediate results are dcmanded, and the effects produced differ considerably from those obtained by the more tedious operations of the East, where human time and labour are less estcemed; this may in some measure account for the doubt and difficulty that has attended the investigation of this subject. It is proper, however, to observe, that Dr. Faraday and the late Mr. Stodart made scveral experiments on wootz, and it was not likely that so accurate an observer as Dr. Faraday would fail to discover the pattern in the cakes, and ascribe it to the true cause; but as his experiments were directed rather to ascertain the properties of the steel itself, than to account for the beauty of the finest Oriental blades, the perfect identity between them and the pattern discovercd in the Indian steel was still unexplained. I think, however, that, independently of the true germ being discernible in the steel itself, we must remember, that one of these cakes is insufficient to make a sword-blade; every blade must be composed of three at lcast ; a hcavy blade would probably require eight, or more, depending on the size, and the skill of the forger, as the cakes seldom exceed two pounds in weight. These cakes, being first drawn into bars, must be welded together, thus forming laminæ by necessity, and not by choice originally; and as the workmen could not fail to discover that, by increasing the number of laminæ, the beauty and the quality of the blade would be improved proportionally, they had only to double the complex bar on itself, and weld again, and thus, by repeating the operation, increase the number of lamine at pleasure. Now it seems evident, that the reason why the steel in India is made in small lumps instead of larger masses is; that larger and more perfect furnaces would be required in the first instance, and then, for want of powerful machinery, the steel could not be drawn out, or tilted into bars; it would not, therefore, be a marketable commodity in countries where manual labour only is employed.

Having forged the blade from such a bar as that before described, the laminæ, or plates, must necessarily be very thin, and in the process of grinding and polishing, break into each other ; the indentations of the hammer, and the clumsiness of the forger, even combining to increase the diversity of figure, thus completing all those variegations of pattern so eagerly sought after in every country, and for many centuries.

One illustration, in conclusion, may suffice; if we examine any mass of crystals, such as fluor-spar, for example, one surface of which is polished, we shall perceive all the pattern and indications
of its crystalline structure. Let us now suppose such a mass to be drawn out to a considerable length, as in forging, the crystals become spread and elongated into delicate tortuous lines, spreading over and throughout the whole substance, and by the union of several such bars, unequally cut through in various parts, we may, I think, imagine all the variety required to fulfil the condition of my argument, which is to prove, that the figure of the genuine ancient and modern Damascus sword-blades is the result of nature, and not of art.

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Ant. XIII.-Remarks on the Origin of the Popular Belief in the Upas, or Poison Tree of Java, by Lieut. Col. W. H. Sykes, F.R.S.

Read March 4th, 1837.
There are very few popular beliefs of any duration, however extravagant or incredible, that cannot be traced to some foundation in truth, however much distorted by ignorance, superstition or folly; and we have a remarkable instance of this in the celebrated Upas, or Poison Tree of Java, whose shade was believed to cxtinguish life in the unhappy beings who sought refuge under it. It was stated to be in a valley in the intcrior of Java, but it was surrounded with so many terrors, that its exact locality was not likely to be well defined or understood; and in this uncertainty originated the fables which have so long been before the public. I am indebted to Sir Charles Forbes, for a copy of a letter addressed to the late W. Taylor Money, Esq., Consul-General at Venice, from a gentleman who visited the Guwo-Upas, or Poisoned Valley, near Batur, in Java, on the 4th of July, 1830. I understand that the letter has appeared in print, but I have not seen it; and I deem it nccessary to incorporate it in the present paper, to facilitate the comparisons and deductions I purpose making. A perusal of it will, I presume, afford satisfactory reasons to conclude, that in this deadly spot originated the belief in the Poison Tree, the mistake of the mephitic vapour escaping from vegetation, rather than from the soil, being natural and probable. The writer of the letter is a gentleman of the name of Loudon, an Englislman, but a landholder in Java, well known to Doctor Horsfield, and full reliance may be placed on the accuracy of his descriptions. He is disposed to question the resemblance between this Valley of Death and the Grotto del Cane, near to Naples; but I will endeavour to show that the difference is only in the physical features of the localities, and that the probability is, that the effects described originate in precisely similar causes. Dr. Horsfield informs me that he was at Batur in 1815 and 1816 , and aware of the vicinity of the poisonous valley, but the natives refused to conduct him to it.

The following is Mr. Loudon's letter :-
" In July last (1830), when returning from a visit to the interior of Java, I cxamincd, in company with several others, the Guwo-Upas, or Poisoned Valley, perhaps the most extraordinary place in the world, and as a description of it may not be uninteresting at your fire-side, the following is the copy of a letter which I have this day written to Dr. Horsfield, the botanist, who was many years in Jara.
"' In the publications of the Batavia Society of Arts and Sciences, I have sometimes read with pleasure your travels and experiments, and particularly that of the Pohu-Upas, at Banjowangie (where I was resident in 1811), as well as your Tour, published by the same Society in the 8th Vol. of their transactions, and while at Batur you state (p.24), 'The Guwor-Upas is dreaded by the natives, and according to their account, resembles the Grotto-del-Cane near Naples. They could not be prevailed on to conduct me to this opening.'
"' The object of this letter is to acquaint you that on the 4th of July last, I visited the valley in question, on my return from a tour through the districts of Bagalun, Banjonvas, and Ledok; and I sloould be happy to have an opinion upon such a phenomenon of nature; and as you have examined the mineralogical constitution of these ranges of mountains, I know no person so capable of giving an opinion on the Valley of Death as yourself. The following is an extract from my Journal on the subject.
" 'Batur, 3rd July, 1830.-This morning, while walking about the village with the Patty (native chief), he told me that there is a valley, only three miles from Batur, that no person could approach without forfeiting their lives; and that the skeletons of human beings, and all sorts of beasts and birds, covered the bottom of the valley. I mentioned this to the Commandant, and Mr. Sprendenberg, and proposed going to see it ; and the Assistant Resident, Mr. Darndels, agreed to go with us early next morning. At this time I did not credit all the Javanese chief told me; I knew that there was a lake on the top of one of the hills that it was dangerous to approach too near ; but I had never heard of this Valley of Death.-Very cold this evening, the therm. $52^{\circ}$.
"، Batur, 4th July.-Early this morning we made an excursion to the extraordinary valley, called by the natives Guwo-Upas, or Poisoned Valley; it is three miles from Batur, on the road to the Djung. Mr. Darndels had ordered a foot-path to be made from the main road to the valley; we took with us two dogs and some fowls, to try experiments in this deadly recess. On arriving at the foot of a mountain we dismounted, and scrambled up the side of a hill, fully a quarter of a mile, holding on by the extended roots and branches of trees, and we were a good deal fatigued before we got up, the path being very steep, and slippery from the heavy rains during the night. When within a few yards of the valley, we experienced a strong, nauseous, sickening, and suffocating smell; but on coming close to the edge, this smell left us. We were now lost in astonishment at the awful scene below us. The valley appeared to be
about half a mile in cireumference, oval; the depth from thirty to thirty-five feet, the bottom quite flat, no vegetation, a few large (in appearance) river stones, and the whole covered with the skeletons of human beings, tigers, pigs, deer, peacoeks, and all sorts of beasts and birds; we could not pereeive any vapour, or opening in the ground, which last appeared to be of a hard sandy substance. The sides of the valley, from the top to the bottom, are covered with vegetation, trees, shrubs, \&e. It was now proposed by one of the party to enter the valley; but at the spot where we were, this was diffieult, at least to me, as a false step would have brought us to eternity, and no assistance could be given. We now lighted our cigars, and with the assistance of a bamboo we went down within eighteen feet of the bottom ; here we did not experience any difficulty in breathing, but a siekening nauseous smell. We now fastened a dog to the end of a bamboo eighteen feet long, and sent him in ; we had our watehes in our hands, and in fourteen seconds he fell on his back; he did not move his limbs or look round, but continued to breathe eighteen minutes; we then sent in another, or rather he got loose from the bamboo, but walked in to where the other dog was lying; he then stood quite still, and in ten seconds fell on his face, and never moved his limbs afterwards, but continued to breathe for seven minutes. We then tried a fowl, which died in a minute and a half; we threw in another, whieh died before touching the ground: during these experiments we experienced a heavy shower of rain, but we were so interested by the awful seene before us, that we did not care for getting wet. On the opposite side of the valley is a large stone, near which is the skeleton of a human being, who nust have perished on his back with his right arm under his head: from being exposed to the weather, the bones were bleached, and as white as ivory. I was anxious to get this skeleton, but any attempt to get at it would have been madness. After remaining two hours in this Valley of Death, we returned; but found some difficulty in getting out; from the late heavy shower the sides of the valley had beeome very slippery, and had it not been for two Javanese behind me, I eertainly must have fallen some distanee below ; being rather heavy, I held on by the branch of a tree; when my foot slipped, the braneh gave way. On reachingour rendezvous, we had some brandy and water, and left this extraordinary valley. Came down the slippery foot-path, sometimes on our hams and hands, to the main road, mounted our horses and returned to Batur, quite pleased with our interesting trip. The human skeletons are supposed to have been rebels, who may have been pursued from the
main road, and taken refuge in the different valleys, and a wanderer cannot know his danger, till he is in the valley, and when once there, he has not the power or presence of mind to return.'
"You will perceive, from the above extract, that there is a great difference between this and the Grotto del Cane, near Naples, where the air is confined to a small aperture, while here the circumference is fully half a mile.
"After I have seen my family at the Hague, I shall go to London, and will do myself the pleasure of calling upon you; in the mean time, I should be happy to have your opinion of the mineral constitution of the hills near this extraordinary valley, where there is not the least smell of sulphur, nor any appearance of an eruption evcr having taken place near it, although I am aware that the whole range is volcanic, as there are two craters at no great distance from the side of the road, at the foot of the Djring, and they constantly emit smoke."

Such is Mr. Loudon's description, and without having visited the spot myself, from the simple perusal of the letter, I would not hesitate to say that the Poisoned Valley is a volcanic crater, in which the igneous action is latent; and the noxious vapour is carbonic acid gas, produced in a manner made perfectly intelligible, by extracts which I shall give from the Abbate Domenico Romanelli's "Viaggio a Pompei," \&c. Mr. Loudon speaks of the absence of any smell of sulphur, and the want of any appearance of an eruption having taken place; but that there are craters at no great distance. This is precisely the case at the Grotta del Cane ; but Mr. Loudon by his description gives a lively idea of his having ascended a volcanic cone, and finding a crater at the top; a precipitous ascent for more than a quarter of a mile (about 500 yards), terminated by an oval valley, with a diameter of about 300 yards, surrounded by a precipitous ledge, not more than thirty-five feet deep. Many such craters may be seen in Italy, and elsewhere. It will not be any objection to this valley being a crater, that the ground appeared to be of a hard sandy substance; for myself and several friends walked at the bottom of the crater of Vesuvius, within a month previous to the eruption of 1822. The effects of the experiments tried by Mr. Loudon with the dogs, are exactly such as are produced at the Grotta del Cane; but from the length of time the dogs continued to breathe; one eighteen minutes, and the other seven minutes, (after walking to where his companion lay), I should doubt whether the noxious gas is in so concentrated a state in the Guwo Upas Valley, as in the Grotta del Cane, particularly as the scarp of the valley is lined with vegetation close
down to the bottom; for though carbonic acid gas is necessary to vegetation, yet in an undue proportion, it is as injurious to vegetable as to animal life. The first dog put in was fourteen seconds before he fell senseless; but at the Grotta del Cane, Doctor Pasquale Panvini, who tried the gas upon himself, was obliged to desist in ten seconds, from approaching suffocation. It appears that Mr. Loudon and his friends remained two hours in this valley of death without detriment, and within eighteen feet of the stratum of carbonic acid gas, which, from its great weight, compared with atmospheric air, the former being 1,526 to 1 , was lying upon the bottom of the valley. Judging from the depth of the stratum in the Grotta del Cane, which according to Abbate Romanelli, does not exceed a palm, ${ }^{1}$ (palmo, a span,) I should have inferred that they might have approached wery much nearer, and safely satisfied themselves whether the gas were carbonic acid, by well-known tests; acidulating a tumbler of water, and trying its effects upon litmus-paper, syrup of violets, lime-watcr, extinguishing a light, \&c.

Dr. Mead, who describes the Grotta del Cane, does not mention the exact height of the gas ; but says, "It has this remarkable difference from common vapours, that it does not, like smoke, disperse itself into the air, but quickly after its rise, falls back again and returns to the earth; the colour of the sides of the grotto being the measure of its ascent : for so far the sides are of a darkish-green, but highcr, common earth. And as I myself found no inconvenience by standing in it (the grotto), so no animal, if its head be above this mark, is the least injured; but when, as the manner is, a dog, or any other creature, is forcibly kept below it, or by reason of its smallness, cannot hold its head above it ; it presently loses all motion, falls down as dead or in a swoon, the limbs convulsed and trembling, till at last no more signs of life appear, than a very weak and almost imperceptible beating of the heart and arteries; which, if the animal be left a little longer, quickly ceases too; and then the case is irrecoverable: but if snatched out and laid in the open air, it soon comes to life again, and sooner if thrown into the adjacent lake." ${ }^{2}$

The newspapers of the last fortnight have given two melancholy instances of the death of several persons from carbonic acid gas, resulting from burning wood or coals in close rooms; and in the case of three of the parties, it is supposed, had they not slept on

[^60]the floor, their lives would not have been endangered; as the pan of coals had been removed before they went to sleep, and had not been very long in their cell in the prison in which they were confined.

With the Abbate Romanelli's book in my hand I have visited the Grotta del Cane, and witnessed the effects upon dogs described by Dr. Mead, corresponding in fact to the effects detailed by Mr. Loudon, in the Poisoned Valley ; and I will now proceed to the explanation of the phenomena, given by Dr. Pasquale Panvini, an able chemist, and friend of the Abbate D. Romanelli. He considers that sulphur, a volcanic product, being in constant contact with water, a decomposition of the latter takes place, and the result is sulphuric acid, which acting upon carbonate of lime, by its greater affinity for lime than carbonic acid, drives off the latter in the gaseous form, and it rises through the Grotta del Cane. All that is wanted is sulphur, watcr, and carbonate of lime, under certain combinations, and all these requisites are plentiful in the neighbourhood of the Grotta del Cane. Why the gas should make its escape through one aperture only, in a surface riddled by volcanic action, is not quite so explicable; but that it has continued in the same state for seventeen or eighteen hundred years, is attested by the Abbate Romanelli's quotation from Pliny, "Scrobs Charonea mortiferum spiritum exhalans."1

The following is the Abbate's account of his friend Panvini's explanation of the phenomenon.-"Egli ripeteva lo sviluppo del gas acido carbonico dalla continua decomposizione dell' acqua in contatto coi sulfori che ad evidenza esistono nelle viscere delle prossime colline. L' acido solforico (olio di vitriuolo), che risulta dalla detta decomposizione, passando al contatto delle pietre calcari, per la sua maggiore affinità colla calce, ne fa scappare l'acido carbonico. Questo restando libero si unisce col calorico che se ne sviluppa, e passando allo stato di gas, si manifesta in questa grotta, e produce cosi terribili effetti." ${ }^{\prime 2}$

To me it appears that the only difference between the Grotta del Cane and the Poisoned Valley is, that in Italy carbonic acid gas issues from a small cave, and in Java it issues from a crater at the top of a hill. Both localities are closely associated with volcanic action, and the noxious gas produces similar effects in both places. It remains to be shown whether or not the laboratory of Nature in Java supplies the constituents for a similar chemical action to that going on near Naples, as cxplained by the Abbate Romanelli.

[^61]Art. XIV.-Notes on the Thags, by Lieutenant Reynolds, of the Madras Infantry, and of H. H. the Nizam's Service. Communicated by Lieutenant Colonel Smythe, of the Madras Cavalry.

Read December 3rd, 1836.

## Introduction, by Lieut. Col. Smythe.

The Paper on the Thags was drawn up in 1832, from the personal observations of Licutenant Reynolds, who had been for a considerable time (nearly two years I believe) employed by the Resident at Hyderabad, as a sort of Agent among that extraordinary people. His principal and public object was to gain information as to the extent and scenes of their depredations, by admitting and taking down the testimony of such among them as were willing to become approvers; so that ultimate steps might be taken to put down the systematic practice of such horrid atrocity. In this he succeeded so well, that whilst I was at Hyderabad in 1833, a body of, I think, nearly three hundred of themı were brought in as prisoners, were tried by the Resident, under a special commission for that purpose, and were punished by hard labour on the roads, to which, I believe, the awarded sentence of death was commuted.

Lieutenant Reynolds, from his continucd sojourn among them, his peculiar position, and the confidence with which he inspired those who claimed his protection, had probably a better opportunity of becoming acquainted with a set of people, whose works were all darkness, and to whom secrecy was essential, than any European ever had: hence we have more minute details than ever appeared publicly before; and he was able to verify, by personal observation, the truth of many circumstances which otherwise were too shocking for belief.

During the trial of the wretches at Hyderabad, some singular things occurred, all tending to confirm his statement of their being exceedingly superstitious, and of their having no adequate idea of the horrible wickedness of their pursuit.

A woman was called on to testify against a man (he was her son), the ordinary oath was administered, and she unhesitatingly denied all knowledge of circumstances, in which it was well known that the prisoncr had been engaged under her very eye. The oath was changed to one held so sacred by her, that she dared not persist

[^62]in her falsehood. A curious exhibition of the existence of conscience (or a feeling rescmbling it) in one, who, if not a professed murderess herself, had been during life the associate of profcssed murderers. And what can be more curious, what can more forcibly show how singularly the mind may be led astray, than the fact, that these wholesale murderers, whose every act showed so utter a recklessness of human life, should have so great a horror of shedding blood? What a nice distinction between the spiller of blood, and the taker of life? Yet, while they glory in the dexterity with which they perform the latter, they reject the former title with abhorrencc; and while they confess themselves to be murderers solely for gain, they think it foul scorn to be called thieves!

The Thags form a perfectly distinct class of persons, who subsist almost entirely upon the produce of the murders they are in the habit of committing. They appear to have derived their denomination from the practice usually adopted by them, of decoying the persons they fix upon to destroy, to join their company; when they take advantage of the confidence they endeavour to inspire, by strangling their unsuspecting victims. They are also known by the name P'hansigars: but in the north-eastern part of the Nizam's dominions, arc usually called T'hags. There are several peculiarities in the habits of the T'hags, in their mode of causing death, and in the precautions they adopt for the prevention of discovery, that distinguish them from every other class of delinquents; and it may be considered a general rule whereby to judge of them, that they affect to disdain the practice of petty theft, house-breaking, and indeed every species of stealing that has not been preceded by the perpetration of murder.

The T'hags adopt no other method of killing but strangulation; and the implement made use of for this purpose, is a handkerchief, or any other convenient strip of cloth. The manner in which the deed is done will be described hereafter. They never attempt to rob a traveller until they have in the first instance deprived him of life; after the commission of a murder, they invariably bury the body immediately, if time and opportunity serve, or otherwise conceal it, and never abandon a corpse on the highway, unless they happen to be disturbed.

To trace the origin of this practice would now be a matter of some difficulty, for if the assertions of the Thags themselves are
entitled to any credit, it has been in use from time immemorial ; and they pretend that its institution is coëval with the creation of the world; like most other inhuman practices, the traditions regarding it are mixed up with tales of Hindú superstitions, and the T"hags would wish to make it appear that in immolating the numberless victims that yearly fall by their hands, they are only obeying the injunctions of the deity of their worship, to whom they say they are offering an acceptable sacrifice.

The object of their worship is the goddess Kali, or Bhavani, and there is a temple at a village, near Mirzapúr, to which the Thags usually send considerable offerings, and the establishments of priests at that shrine are entirely of their own community. Bhaváni, it seems, once formed the determination of extirpating the whole human race; she sacrificed all but her own disciples, but she discovered, to her astonishment, that through the intervention of the creating power, whenever human blood was shed, a fresh subject immediately started into existence, to supply the vacancy. She therefore formed an image, into which she instilled the principle of life, and calling together her disciples, instructed them in the art of depriving that being of life, by strangling it with a handkerchief.

The method was found on trial to be effectual, and the goddess directed her worshippers to adopt it, and to murder without distinction all who should fall into their hands, promising that she would herself dispose of the bodies of their victims, whose property she bestowed on her followers ; and also that she would be present at, and preside over, and protect them on those occasions, so that none should be able to prevail against them.

Thus, say the T"hags, was our order established, and we originally took no care of the bodies of those who fell by our hands, but abandoned them wherever they were strangled, until one man more curious than the rest, ventured to watch the body he had murdered, in expectation of seeing the manner in which it was disposed of. The goddess of his worship descended as usual to carry away the corpse, but observing that this man was on the watch, she relinquished her purpose; and calling to him angrily, rebuked him for his temerity, telling him she could no longer perform her promise regarding the bodies of the murdered, which his associates must hereafter dispose of the best way they could.

Hence, say they, arose the practice invariably followed by the Thags, of burying the dead; and to this circumstance principally is to be attributed the extraordinary manner in which these atrocities have remained unknown; for with such circumspection and secrecy
do they proceed to work, and such order and regularity is there in all their operations, that it is next to impossible a murder should ever be discovered.

Absurd as the foregoing relation may appear, it has had this effect on the minds of the Thags, that they do not seem to be visited with any of those feelings of remorse, or compunction, at the inhuman deeds in which they have have participated, that are commonly supposed to be, at some period of their lives, the portion of all who have trafficked in human blood; on the contrary, they dwell with satisfaction on the recollection of their various and successful exploits, and refer, with no small degree of pride and exultation, to the instances in which they have been personally engaged, especially if the number of their victims has been great, or the plunder they have acquired has been extensive.

Notwithstanding the adherence to Hindú rites of worship observed among the Thags, a very considerable number of them are Musulmans ; no judgment of the birth or caste of a Thag can, however, be formed from his name, for it not unfrequently happens that a Hindú T"hag has a Musulman name, with a Hindú alias attached to it; and vice versa with respect to T"hags who are by birth Muhammedans. In almost every instance, the Thags have more than one appellation by which they are known. Of the number of Musulman Thags, some are to be found of every sect, Shaikh, Syed, Mogul, and Pattan, and among the Hindús, the castes chiefly to be met with, are Bráhmans, Rajpúts, Sodhís, Ahírs, and Kolís. In a gang of Thags, some of every one of these castes may be found,-all connected together by the same peculiar plan of murder practised by them; all subject to the same regulations, and all, both Hindús and Musulmans joining in the worship of Bhaváni. They usually move in large parties, often amounting to 100 or 200 persons, and resort to all manner of subterfuges for the purpose of concealing their real profession. If they are travelling southward, they represent themselves to be either proceeding in quest of service, or on their way to join the regiments they pretend to belong to in this part of the country; when, on the contrary, their route is towards the north, they represent themselves to be sepoys from corps of the Bombay or Nizam's army, who are going on leave to Hindústan.

The gangs do not always consist of persons who are Thags by birth ; it is customary for them to entice by the promise of monthly pay, or by holding out hopes of amassing money, many persons who are ignorant of the deed of death that is to be perpetrated for the attainment of these objects, until made aware of the reality by
seeing the victims of their cupidity fall under the hands of the stranglers; and the Thags declare that novices have occasionally been so horrified at the sight, as to effect their immediate escape; others, more callous to the commission of crime, are not deterred from the pursuit of wealth by the frightful means adopted to obtain it, and remaining with the gang, too soon begin personally to assist in the perpetration of murder. Many of the most notorious Thags are the adopted children of others of the same class; they make it a rule when a murder is committed, never to spare the life of any one, either male or female, who is old enough to remember and rclate the particulars of the deed. But in the event of their meeting with children of such a tender age as to make it impossible that they should be able to reveal the fact, they generally spare their lives, and, adopting them, bring them up to the trade of Thagí. These men, of course, eventually become acquainted with the fact of the murder of their fathers and mothers, by the very persons with whom they have dwelt since their childhood, but are still not deterred from following the same dreadful trade.

It might be supposed that a class of persons whose hearts must bc effectually hardened against all the better feelings of humanity, would encounter fcw scruples of conscience in the commission of the horrid decds whereby they subsist; but, in point of fact, they are as much the slares of superstition, and as much directed by the observance of omens in the conmission of murder, as the most inoffensive of the natives of India are in the ordinary affairs of their lives.

The chicf symbol of worship among the Thags, is a Khodalí, or pick-ase; it is known among them by the names of Nishán Kassí, and Mahí: with every gang there is carricd a Nishán, which is in fact their standard, and the bearer of it is entitled to particular privileges. Previous to commencing an expedition, the heads of the party celebrate a Píja to the Nishán, ${ }^{1}$ which is typical of the deity of their worship : the ceremonies differ little from the usual rites of Hindús on similar occasions. A Hindú T"hag of good castc is employed in making a quantity of the cakes called Púrics, which being consecrated, are distributed among the assembly. The Nishán is bathed and perfumed in the smoke of burning Benjamin, and is afterwards made over to the Nishán Wala, who reccires it in a piece of cloth kept for that purpose ; it is then taken out into the open fields, in the expectation of an omen being observed. The Nishán is deposited in a convenient spot in the direction the party intends to proceed, and certain persons are deputcd to keep watch

[^63]over it. There are particular birds and bcasts that are looked upon by the Thags as the revealers of omens, to whose calls and movements their attention is on this occasion particularly directed, among the number are the Owl, the Jay, the Jackall, the Ass, \&c. If one of these calls out or moves to the right-hand side, the omen is looked upon as favourable, and the project is not abandoned. It is not unusual for the Thags to look for a favourable omen previous to the commission of a murder, and they are frequently deterred from carrying their intentions immediately into effect, by the observance of an unfavourable sign, such as a snake crossing their path when in pursuit of a victim, or the circumstance of any of the animals before mentioned calling out on their left-hand sides. This no doubt accounts for the Thags so often keeping company with travellers for many days previous to murdering them, although they had determined upon their sacrificc from the moment of their first joining the party. The omen is denominated Sagun, by the T"hags. A corruption no doubt of the Persian Shagún.

In the event of an expedition proving more than ordinarily successful, a Púja is usually made to Bhavání, and a portion of the spoil taken by the gang is set aside for the purpose of being sent to the pagoda before alluded to, as an offcring to the goddess. Propitiatory offerings are also made, and various ccremonies performed before the Khodálí, or Nishán, should the Thags have failed in obtaining any plunder for a length of time. In every gang of Thags, there are to be found one or more Jemidars, who appear to hold that rank not by the choice of their followers, but in conscquence of their wealth and influence in thcir respective villages, and of having assembled their own immediate followers in the vicinity of their homes. The profits of a Jemidar arc, of course, greatcr than those of his followers; he receives $6 \frac{1}{2}$ or 7 per cent. on all silver coin and other property, not hereafter specified, and then sharcs in the remainder in common with the other Thags of the party. When gold is obtained in coin or in mass, the tenth part is taken by the Jemidar, previous to dividing it, and he has a tithe of all pearls, shawls, gold, embroidered cloth, brass and copper pots, horses, \&c. The Jemidar acts as master of the ceremonies when the Púja is performed, and he assigns to every Thag the particular duty he is to undertake in the commission of every murder that is detcrmined on.

These duties are performed in succession by all the T'hags of the party, and to the regularity and system that cxists among them, is to be attributed the unparalleled success that has attended their proceedings; ncxt to the Jemidar is the Buttoat, or strangler, who
carries the handkerchief with which the Thags usually murder their victims. This implement is merely a piece of fine strong cotton cloth about a yard long; at one end a knot is made, and the cloth is slightly twisted and kept ready for use, in front of the waistband of the person carrying it. There is no doubt but that all T'hags are expert in the use of the handkerchief, which is called Rumal, or Palu, but, if they are to be believed, only particular persons are called upon or permittcd to perform this office. When a large gang is collected, the most able-bodied and alert of their number are fixed upon as Buttoats, and they are made the bcarers of the handkerchiefs, only after the performance of various and often expensive ceremonies, and only on their observance of a favourable omen. The old and experienced T'hags are denominated Guru Bhow, and the junior T'hags make a merit of attending upon them, filling their Hukahs; shampooing their bodies ; and performing the most menial offices. They gradually become initiatcd in all the mysteries of the art. And if they prove to be powerful men, these disciples of the Guru are made Buttoats. The T'hags say, that if one of their class was alone, and had never strangled a person, he would not presume to make use of the handkerchief, until he observed a favourable omen. The ceremonies are the same as those described in carrying out the Nishán, in room of which the handkerchief is on this occasion substituted, and an offering of Pán, Cocoa-nut, Turmeric, red ochre, \&c., is made. When a murder is to be committed, the Buttoat usually follows the particular person whom he has been nominated by the Jemidar to stranglc, and on the preconcerted signal being given, the handkerchief is seized with a knot in the left hand, the right hand being some inches further up, in which manner it is thrown over the head of the person to be strangled, from behind; the two hands are crossed as the victim falls: and such is the certainty with which the act is done, as the T'hags frequently declare, that before the body falls to the ground, the eyes usually start out of the head, and life becomes extinet. Should the person to be strangled prove a powerful man, or the Buttoat inexpert, another 'T'hag lays hold of the end of the handkerchief. The perfection of the art is described to be when several persons are simultaneously murdered without any of them having time to utter a sound, or to be aware of the fate of their companions. Favourable opportunities are given to the Buttoats to make their first essay in the art of strangulation. When a single traveller is met with, a novice is instructed to make a trial of his skill : the party sets off during the night, and stops while it is still dark, to drink water, or to smoke. While seated for this
purpose, the Jemidar inquires what time of night it may be, and the T"hags immediately look out at the stars to ascertain, this being the pre-concerted signal; the Buttoat is immediately on the alert, and the unsuspecting victim, on looking up at the heavens in common with the rest of the party, offers his neck to the handkerchief, and becomes an easy prey to his murderer. The Buttoat receives eight annas extra for every murder that is committed, and if the plunder is great, some article of value is assigned to him over and above his share. The persons intended to be murdered are called by different names, according to their sect, profession, wealth, \&c. \&c. A victim having much property is entitled Naimud, and they are also generally called Rosy.

To aid the Buttoat in the perpetration of a murdcr, another Thag is specially appointed, under the denomination of Samsualı; his business is to seize the person to be strangled by the wrists, if he be on foot, and by one of his legs, if he be on horseback, and so to pull him down. A Samsúah is sent off to the traveller, and he places himself in a convenient situation near him, to be ready when required.

In the event of the traveller being mounted on horse-back, a third Thag assists, under the designation of Worawal ; his business is to lay hold of the horse's bridle, and check it as soon as the signal for murder is given.

One of the most necessary persons in a gang of Thags, is he who goes by the name of Tillaí. The Thags do not always depend upon chance for obtaining plunder, or roam about in the expectation of meeting travellers, but frequently take up their quarters in or near a town, or some great thoroughfare, from whence they make excursions according to the information obtained by the Tillaís; these men are chosen from among the most smooth-spoken and intelligent of their number, and their chief duty is to gain information ; for this purpose they are decked out in the garb of respectable persons, whose appearance they must have the tact of putting on. They parade the bazaars of the town near which their associates are encamped, and endeavour to pick up intelligence of the intended despatch or expected arrival of goods, of which information is forthwith given to the gang, who send out a party to intercept them. Inquiry is also made for any party of travellers who may have arrived, and put up in the bazaars, or elsewhere; every art is brought into practice to scrape an acquaintance with these people; they arc given to understand that the Tillaí is travelling the same road, an opportunity is taken to throw out hints
regarding the insecurity of the roads, and the frequency of murders and robberies, an acquaintance with some of the friends or relations of the travellers is feigned, and an invitation given to partake of the repast that has been prepared at the place where the Tillaí is put up, the convenience of which, and the superiority of the water, are abundantly praised. The result is, that the travellers are inveigled into joining the party of Thags, and they are feasted and treated with every politcness and consideration by the very wretches who are also plotting their murder, and calculating the share they shall acquire in the division of their property. What must be the feelings of men, who are actuated by motives so entirely opposed to their pretended civility of behaviour, is difficult to imagine; and I know not whether most to admire the duplicity with which they continue to conceal their murderous intentions, or to detest the infernal apathy with which they can eat of the same dish, and drink out of the very cup that is partaken of by the victims they have fixed on to destroy. It is on the perfcction which they have in the art of acting as Tillaís, that the Thags particularly pride themselves, and it is frequently boasted of by them, that it is only once necessary to have an opportunity of conversing with a traveller, to be able to mark him as an easy victim, whenever they choose to murder him.

Instances sometimes occur, when a party of Thags find their victims too numerous for them to master while they remain in a body, and they are seldom at a luss for expedients to create dissensions, and a consequent division among them.

If all their arts of intriguc and cajolery fail in producing the desired result, an occasion is taken advantage of to ply the travellers with intoxicating liquors, a quarrel is got up, and from words turn to biows, which end in the dispersion of the company, who, proceeding in different roads, fall an easy prey to their remorseless destroyers. Having enticed the travellers into the snare they have laid for them, the next object of the Thags is to choose a convenient spot whereon to murder them; this, in the technical language among them, is denominated a Bhíl, and is usually fixed upon a short distance from a village on the banks of a Nalah, where the trecs and underwood afford a shelter from the view of occasional passengers. The Thag who is sent on this duty is called a Bhilla, and having fixed upon the place, he either returns to the encampment of his party, or meets them in the way, to report the result of the inquiry ; if the Bhilla returns to the camp with his report, the Luggaís or gravediggers are sent out with him to prepare a grave for the interment
of the person it is intended to murder ; arrangements are previously made, so that the party in company with the travellers shall not arrive too soon at the Bhíl; at the particular spot agreed upon the Bhilla meets the party, a recognition takes place, the jemidar calls out "Bhilla, have you cleared out the hole ?" the Bhilla replies "Manjeh," on which the concerted signal is given that serves as the deathwarrant of the unheeding travellers, who are forthwith strangled; while some are employed in rifling the bodies, others assist in carrying them away to the ready prepared graves; the Luggaís perform the office of burying them, and the remainder of the gang proceeds on its journey, leaving with them a certain number of the Tillaís or watchmen on the look-out, to prevent their being disturbed; should a casual passenger appear, the Tillaí gently throws a stone among the Luggaís, or grave-diggers, who immediately desist, and croueh on the ground until the danger is averted.

After the interment is completed, the Luggais rejoin their party ; but it is not unusual to leave one or more of the Tillais to keep watch, to prevent the bodies being dug up by beasts of prey, and if a discovery be made by the village-people, to give instant information to their companions, in order that they may have the opportunity of getting out of the way ; it often happens that the arrangements and precautions above mentioned cannot be entered into, that travellers are casually met with on the road, and hastily murdered, and as carefully interred; in these cases, if the opportunity is afforded them, the T'hags always leave some one to keep wateh at the place, and rather than run the risk of detection by the bodies being dug up by wild beasts, they return and re-inter them.

If the ground is strong they never touch the corpse, but if the soil is of that loose texture as to render it probable that the bodies in swelling will burst the graves, they generally transfix them with spears or knives, which effectually prevents that result. When the Thags may choosc to strangle their victims in some more exposed situation, as in a garden near a village where they may have put up for the night, they resort to further preeations to prevent discovery. The grave is on this oceasion prepared on the spot after the nurder has been committed, and the corpse having been deposited therein, the superfluous soil is carried away in bundles, and strewn in the neighbouring fields; the place is watered and beaten down with sticks, it is ultimately plastered over with cow-dung, and chulahs or fire-places for cooking are made on this spot. If the party find it necessary to decamp, they light fires in the chulahs, that they may have tlie appearance of having been uscd to cook in;
should they determine on staying, they use the chulahs to cook their food in on the succeeding day, having no qualms of conscience to prevent their enjoying the victuals prepared on the spot, the associations attendant on which ought to be considered too revolting to dwell upon.

The parties of Thags being often very large, they have many beasts of burden in their train, as bullocks, ponies, and sometimes even camcls; if they remain at a place where they have committed a murder, and do not construct fire-places, they take the precaution of tying their cattle on the spot. The Thags say they can always recognise the firc-places of their own class, there being peculiar marks about them, which are made to serve as directions to the next party that passes that way. The T"hags always prefer burying their victims at some distance from the public road, and therefore, as soon as the bodies of murdered persons have been stripped of the property found upon them, they are carried on the shoulders of the Luggaís to the spot selccted for interring them. They say they are more careless about the conccalment of a corpse in the Nizam's country than elsewhere, for they have been always so secure from molestation, that they have frequently left bodies exposed without running any risk, for no one takes the trouble of inquiring about the matter.

The division of spoil docs not usually take place immediately after the perpetration of a murder, but every person secures a portion of the property on the spot, and when a convenient opportunity occurs, each produces the article he has been the bearer of, and a division is made by the jemidar, whose share is in the first instance deducted; then the Buttoats, the Sumsuahs, and Tillaís claim the extra reward for each murder they have assisted, and the Luggaí takes the reward for the trouble he had in digging the grave, and the residue is divided share and share alike among the whole gang. It may be supposed that the cupidity of individual Thags may occasionally induce them to attempt to defraud their comrades, by secreting any articles of value at the time the murdercd bodies are plundered; but they say that the whole class are bound by an inviolable oath to produce for appropriation to the common stock, everything that may fall into their hands while engaged with a particular party. The division of plunder, as may be supposed, often leads to the most violent disputes, which it is astonishing do not end in bloodshed; but it might almost be supposed the Thags have a prejudice against the spilling of blood, for they refuse making use of the weapons they usually wear, even in defence of their own per-
sons. The most wanton prodigality occurs when plunder is divided, and occasionally the most valuable shawls and brocades are torn into small stripes, and distributed among the gang, should any difference of opinion arise as to their appropriation. The T"hags say this is also done that every person may run the same risk, for such an article could not be shared among them until converted into money, and some danger is attendant upon the transaction.

They appear invariably to destroy all Húndís that fall into their hands, as well as many other articles that are likely to lead to detection; ready money is what they chiefly look for, and when they have a choice of victims, the possessors of gold and silver would certainly be fixed upon in preference to others. In consequence, it seems to have been a general practice among the Thags to way-lay parties of Sepoys of the Bombay and Nizam's armies, while going on leave to Hindústan, for the sake of the specie they are usually the bearers of; and they remark, that of the many Sepoys who are supposed by their officers to have abandoned the service, while their friends and relations consider them to be still with their regiments, they alone can tell their fate, the whole number being strangled by their hands. The immense wealth that has at various times fallen into the hands of these miscreants has been expended in the grossest extravagance and debauchery, and as may be supposed, their illgotten gains remain but a short time in their possession.

The T"hags have in use among them not exactly a language of their own, but they have sets of slang terms, and phrases, which give them the means of holding a conversation with persons of their own class without any chance of being understood by the uninitiated. Their term of salutation, whereby also they recognise each other if they casually meet without being personally acquainted, is "Ali Khan Bhai Salam." That which appears most extraordinary is the manner in which the Thags recollect the names of their comrades, as well as their persons, and they declare, that though the name of any one of a gang may have escaped their recollection, they never forget the person of a Thag who has assisted them in the perpetration of murder. The Thags, indeed, seem to know each other almost instinctively, and the quickncss with which the recognition between individuals takes place is so surprising, as almost to warrant the supposition that a sort of free-masonry has been established among them.

To facilitate their plan of operation, the Thags have established a regular system of intelligence and communication throughout the countries they have been in the practice of frequenting, and they
become acquainted with astonishing celerity with the proceedings of their comrades in all directions. They omit no opportunity of making inquiries regarding the progress of other gangs, and are equally particular in supplying the requisite information of their own movements; for this purpose they have connected themselves with several persons residing in the Nizam's dominions as potails and cultivators of villages, many of the latter of whom follow the profession of Thags in conjunction with their agricultural pursuits.

The Marwaris and other petty bankers are.also frequently the channels of communication between Thags, and there is no doubt, the purchasers of the property of the murdered. The religious mendicants throughout the country occasionally assist in this measure, by becoming the receivers of messages from bands of Thags to be delivered to the next party that comes in their way. With this view also they have adopted the practice of forming chulahs, or fire-places, of a particular construction, to serve as marks of their progress through the country: when a party of T'hags come to a road that branches off in two directions, they adopt the precaution of making a mark for the guidance of those associates who may come after them, in the following manner. The soil in a convenicnt spot is carefully smoothed, and the print of a foot is distinctly stamped upon it; a Thag, on seeing this mark, which he naturally searches for, knows, by the dircetion in which it points, which track has been followed by those that preceded him. The peculiar designation by which they are known, is a point on which the T'hags are particularly tenacious, and they attach an importance and even respectability to their profession, that they say no other class of delinquents is entitled to. The denomination of thief is one that is peculiarly obnoxious to them, and they never refrain from soliciting the erasure of the term, and the substitution of that of Thag whenever it may appear in a paper regarding them, declaring, that so far from following so disgraceful a practice as theft, they scorn the name, and can prove themselves to be as honest and trustworthy as any one else, when occasion requires it. It seems their ambition to be considered respectable persons, and with this view they expend much of their gains on their personal decorations, even those who have been seized and admitted as evidence are more solicitous about their dress and decent appearance than anything else. They mostly seem to be men of mild and unobtrusive manners, possessing a cheerful disposition entirely opposed to the violent passions, and ferocious demcanour, that are usually associated with the idca of a professed murderer; such is the extent to which this dreadful
system has been carried, that no idea can be formed of the expenditure of human life to which it has given occasion, or the immensity of the wealth that has been acquired by its adoption.

When it is taken into consideration that many of the Thags already seized confess to their having, for the last twenty-five or thirty years, annually made a tour with parties of more than a hundred men, and with no other object than that of murder, and that they boast of having successfully put their tens and twenties to death daily, and that they say an enumeration of all the lives they have personally assisted to destroy, would swell the catalogue to hundreds, and as some declare to thousands, some conception of the horrid reality may be formed. Of the amount of the property that they have yearly made away with, it must be impossible to form any calculation; for, independent of the thousands in ready money, jewels, and bullion, the load of valuable clothes and every description of merchandise that continually fall into their hands, the Hundís, that they invariably destroy, must amount to a considerable sum.

The impunity with which the Thags have heretofore carried on their merciless proceedings, the facility they have possessed of recruiting their numbers, which are restricted to no particular class or sect ; the security they have had of escaping detection, and the ease with which they have usually purchased their release when seized by the officers of the weak native governments, in whose dominions they usually commit the greatest depredations, have altogether so tended to confirm the system, and to disseminate it to the fearful extent to which it has now attained, that the life of no single traveller on any of the roads of the country has been safe, and but a slight chance has been afforded to large parties of escaping the fangs of the blood-thirsty demons who have frequented them.

> Art. XV.-Note on the Saltness of the Red Sea, by J. G. Malcolmson, m.r.A.s., Surgeon, Madras Establishment.

Read April 15, 1837.
In the Asiatic Society Journal for September 1835, Mr. Prinsep, the distinguished Editor of that invaluable publication, has given the result of the examination of two bottles of sea-water; one from the Indian Ocean, the other from the Red Sea. The officers of the Hugh Lindsay steamer having reported that, in consequence of the greater saltness of the Red Sea than of the Ocean, it was necessary " to blow-off much more frequently while in that part of the voyage," Lieut. Burnes had, therefore, brought to India a bottle of the water of the Ocean, and of the Red Sea, which were found to have (at the temperature of $86^{\circ}$ ), a specific gravity of 1.0254 and 1.0258 respectively ; too small a difference to causc any sensible effect in blowingoff. But as lime might exist in greater quantity in the inland sea, the analysis was principally directed to ascertain the proportions of sulphuric acid and lime, the precipitation of which is the cause of the necessity of blowing-off.

The following are the results :

|  |  | Indian Ocean. | Red Sea |
| :---: | :---: | :---: | :---: |
| Sulphuric acid |  | $1 \cdot 82$ | 1.80 |
| Lime |  | 0.70 | $0 \cdot 8$ |
| Common salt |  | $32 \cdot 8$ | 33 |

Mr. Prinsep proceeds to quotc an account of an analysis by Dr. Ure, of a specimen of water brought from near Berenice, by Mr. Wilkinson, to the following effect :-"The specific gravity is 1.035 ; and 1000 grains of water contain forty-three of saline matter, of which about four grains are muriate of lime, with a little muriate of magnesia, and the remainder muriate of soda, with a little sulphate of magnesia. The specific gravity of water of the open ocean, in the same latitude, is only 1.028 , and contains not more than thirty-six grains of saline matter in a similar quantity." Mr. Prinsep accounts for the discrepancy, by supposing the water examined by Dr. Ure, to have bcen obtained from an insulated position near the shore, and adds,-" the hydrometer is in all cases the safest tcst, and it is a pity that it had not been resorted to in the steam navigation of the Mediterranean sea, which has been the source of such contradictory statcments."

Having furnished myself with the neccssary apparatus, previous
to my return from India by the Red Sea, the beginning of last year, with a view of this very subject, I found the specific gravity of the sea, from Mangalore in Malabar, along the Indian coast to Bombay ; in that harbour (in December, 1835) ; and of the ocean between India and Cape Furtak and Bab-cl-Mandeb, in Arabia, to be $1 \cdot 0265$. The temperature of the water did not vary more than a few degrees, and, being barely sufficient to cause a difference of a few hundredths of a grain, may be safely neglected. The tempcrature of the sea opposite to Mangalore was $83^{\circ}$, which it retained till north of Fort Victoria, latitude $17^{\circ} 56^{\prime}$ North, when it was found to have fallen to $79^{\circ}$, and in Bombay Harbour was as low as $76^{\circ}$. Throughout the voyage to the Arabian coast (in January) it was about $79^{\circ}$ when the winds were slight, but was remarkably affected by the freshening of the brecze, falling soon after to $76^{\circ}$, that of the air varying from $74^{\circ}$ to $76^{\circ}$. On the 12 th of January, when coming in sight of Cape Furtak, the sea was $75^{\circ}$;-the thermometcr in the cabin being $73^{\circ}$ at eight, A. m., and $75^{\circ}$ at three, p. м., the wind blowing pretty fresh from N.E. by N., and the wet-bulb thermometer falling to $65^{\circ} 5$; while Daniell's hygrometer failed to form any dew with ether of ordinary strength.

In the roads of Mocha, and ncar Kamran Island, the Red Sea hardly differed in specific gravity from the occan, while off Cosseir, at a considerable distance from the shore, it attained the specific gravity of $1 \cdot 035$, nearly corresponding to that brought from Berenice by Mr. Wilkinson. When it is considered that no river runs into this long and narrow gulf, surrounded by dry and burning sands, it is not to be wondered at, that it should be so remarkably salt; an effect hardly visible at Mocha, from its proximity to the ocean, from which a current almost constantly sets into the sea. I regret that severe sickness prevented my ascertaining the rate at which the density of the sea increases on sailing from Mocha to Cosseir. Had Mr. Burnes stated from what part of the sea he took the water, I have no doubt that the result of Mr. Prinsep's cxamination would have corresponded with that above given.

That this great increase of specific gravity would sensibly affect the boilers of a steam engine, will be evident from the following remarks:-Dr. Wollaston, in the Philosophical Transactions for 1829, in a paper on the saltness of the Mediterranean, gives a formula for finding the quantity of salt by the specific gravity, which I have found to give sufficiently correct results, when compared with the experiments on the waters of the Indian Seas. He directs the excess of the specific gravity to be multiplied by 144 , which gives
the saline contents, plus ( + ) a quantity of water retained by the deliquescent salts when dricd at $212^{\circ}$. In the present case, it will be better to cmploy the factor $\cdot 134$, which will give the salts dried at a temperature at or above $300^{\circ}$. IIence, if a portion of water of the Indian Occan, ${ }^{1}$ of specific gravity, $1 \cdot 0265$, which I found it, afforded sulphuric acid 1.82 grains, and lime $\% 0$, that of Cosseir would, in the same bulk, furnish 2.40 grains, and 955 of a grain; or about one-third more, which, in so insolublc a salt as sulphate of lime, must exert a considerable influence over the rapidity of deposit in the boilers, and be the cause of some delay in the voyage.
${ }^{1}$ I have used Mr. Prinscp's analysis and my own specific gravity of the Indian Occan, as by this means the proportion between the saltness of the ocean and the Sea of Cosseir is better seen. If this is objected to, it will make the excess still greatex.

## JOURNAL

OF THE

## ROYAL ASIATIC SOCIETY.

Art. XVI.-An Inquiry into the Fate of the Ten Tribes of Israt after the Fall of Samaria; with a View of the History of the Assyrian Empire at that period, as derived from a comparison of what is recorded on the subjeet in the Histories of the Jews, the Greeks, and the Persians. By the late T. M. Dickinson, Esq., Secretary of the Bombay Branch of the Royal Asiatic Society.

Read January 7th, 1837.

## PART I.

ON THE ANCIENT HISTORY OF ASSYRIA AND PERSIA; AS CONNECTED WITH THE DESTRUCTION OF THE KINGDOM OF ISRAEL.

The points discussed in the following pages, arc the subject of an inquiry into which I was led, some time ago, by finding in the writings of an Arabian geographer, mention made of several places, which attracted my attention from their agreement in name with those to which we read that the Israelites were carried, when Samaria was destroyed by the armies of Assyria. Knowing that it was still a matter of doubt where the captives of Israel were placed, and finding in all that had been written on the subject, nothing which appeared satisfactory or conclusive, I was curious to ascertain, whether, in a case so authentic and so interesting, something like certainty could not bc elicited by reflection and research; which led to an inquiry, somewhat longer than I anticipated, which forms the subject of the following pages.

I found in the very outset of my inquiry that it involved, and indeed essentially demanded, a careful consideration of the political state of the Assyrian empire, at the time of the captivity; a subject which, more perhaps than any other, has exercised the research and ingenuity of the learned, has been dimmed by clouds of learning
and criticism, and buried in a darkness not its own. It is true that in the sources from which our information regarding the history of Assyria is drawn, there are many differences and apparent contradictions, sufficient, at first sight, to warrant an idea that the several accounts are utterly discordant and at variance with each other; and as the period to which they refer is one that stands at the farthest verge of historical record, obscurcd and almost lost in the dark shade of extreme antiquity, we cannot be surprised that men who were studious and ardent in the investigation of all that relates to these ancient times, should, when cxcited by the great interest of the subject, have been beguiled from the way of truth and history, into the wide field of speculation and conjecture ; that in their desire of explaining what they did not understand, they allowed their judgment to follow their imagination-and thus, on the assumption of a contradiction in history, thought themselves at liberty to adopt any probable conjecture, or hypothesis, which would reconcile the apparent discrepancies of their subject, and free them from the many imaginary difficulties, by which they found themselves so seriously perplexed.

The accounts which are preserved of the Assyrian empire, are chiefly referable to three great sources,--the histories of the Hebrews, the Greeks, and the Persians; and it has generally been supposed that these three histories, in all that relates to the affairs of Assyria, are at variance with each other, and in some cases also, inconsistent in themselves. It has, therefore, been the endeavour of scveral writers, to reconcile these apparent discrepancics and contradictions; but so numcrous and so different are the systems they have pursucd, so unscrupulous have they been in rejecting and falsifying whatever opposed their own views or opinions, that the subject has come to be regarded as a question of curious but useless speculation and conjecture-a subject on which anything may be surmised, but which cannot be brought to a satisfactory conclusion. I shall cndeavour in the first part of this inquiry to show that these histories, if taken in a plain and literal sense, are not contradictory to, or at variance with, each other; that on the contrary, the leading features agree in all, in a manner so remarkable, as to afford a strong argument in favour of the general truth of all. And I hope to prove, that if so viewed together, they will be found to explain and to elucidate each other, and to throw much light on a portion of very ancient Oriental history, which at present is involved in great obscurity.

To commence with the Greek accounts of Assyria. We know of two Greek historians only, who have written on the subject of Assy-
rian history, on the authority of their own personal researches. The one was Herodotus, " who drew his materials from records which respected the national crown of the Medes," about the middle of the fifth century beforc the Christian era. The other was Ctesias, ${ }^{1}$ who compiled his history from the Archives, which contained the successions on the imperial throne of the successors of Ninus, about the end of the same century. It is generally supposed that these two histories are at variance, and not to be reconciled with each other; and it will, therefore, be my first endeavour to show the incorrectness of this opinion.

We learn from Ctesias, as hc is quoted by Diodorus, Eusebius, Syncellus, and other chronologists, that a long and continued dynasty of kings, from Ninus, who built the walls of Nineveh, to Sardanapalus, the last of the Assyrian family, swayed the sceptre of Western Asia for upwards of 1,300 ycars. That in the reign of Sardanapalus, about 821 years в. c., ${ }^{2}$ a revolution was effected in the Assyrian

[^64]1. Arbaees, reigned
2. Mandauees
. $\quad$. $\quad$. $\quad$. $\quad . \quad 28$ years.
empire, by Arbaces, a Mede, at the instigation, and with the aid, of Belesys, a Babylonian, which ended in the capture and destruction of Nineveh, the death of Sardanapalus, and the elevation of Arbaces, a Median prince, to the vacant thronc of the successors of Ninus. From this period, Diodorus informs us, from the same authority, that the Median supremacy was established in the East, and continued in the hands of Arbaces, and his successors, for a period of 267 years, through nine generations, down to Aspadas, whom the Greeks called Astyages, whose reign was terminated by the conquests of Cyrus, which raised the newly established kingdom of Persia to the supremacy of the nations of Western Asia.

From Herodotus we learn, that after the Assyrians had been in posscssion of Upper Asia for 520 years, the Medes revolted, and succeeded in shaking off the yoke of Assyria. That they remained for some time in the enjoyment of a state of wild independence, without the control of any sovereign authority, till 710 years before the Christian era; ${ }^{1}$

It is to be observed with regard to this list, that in the present editions of Diodorus's works, the duration of the reigns of Mandauees and Artyelas, is given as fifty years for eaelı. But Syncellus and Eusebius, who both wrote on the same authority, agree in assigning the shorter periods, whieh are here adopted. The duration of the reign of Astyages is not given by Diodorus; it is, therefore, taken on the authority of Herodotus.

Now the beginning of the reigu of Cyrus the Great, is generally placed at the year b. c. 559. It is, however, probable that this refers to the period when Cyrus was plaeed at the head of the Persian armies, when they rose against the Median king; and that it was some time before he was strong enough to depose Astyages. I will, therefore, take, with Dr. Russell, the year 554, as the last year of the reign of Astyages, whieh, added to 267 , the sum of the nine reigns above detailed, gives the year B. c. 821 , as the date of the aecession of Arbaces the Mede, to the throne of Sardanapalus.-See several authorities in support of this, in Russell's Connexion of Sacred and Profane IIistory, Book II. e. 1.
${ }^{1}$ This date is taken from Diodorus Sieulus, who says, Lib. II. p. 118, that the revolt of the Medes under Deioess, as related by Herodotus, oeeurred in the seeond year of the seventeenth Olympiad, whieh eorresponds with the year b. c. 710. Herodotus has assigned two different periods for the duration of the Median power, and the reigns of the Median kings, whieh I do not think has been elearly explained. He gives a list of four kings of Media, from Deioees to Astyages, who was deposed by Cyrus, and makes the sum of their reigns amount to 150 years. In another place he says, that the Median power fell before Cyrus, after it had subsisted 128 years; exelusive of a period of twenty-eight years, during whieh he tells us the Seythians leld possession of Upper Asia; making thereby an interval of 156 years from the aceession of Deioees to the defeat of Astyages, by Cyrus and the Persians. Now the proper explanation of these seeming ineongruities, appears to me disecrnible from a eareful atteution to the words of Herodotus. It is more than probable, that Cyrus was invested with the royal title in his native eountry, before he lad won the seeptre of the Medes. During this interval, Astyages was still the
when, to save their country from anarchy and ruin, they elected Deioces to be their king. Deioces established himself at Ecbatana, which he henceforth made the capital of his kingdom, and persuaded his countrymen to enclose it with walls. After a reign of fifty-three years, he died, and was succeeded by his son Phraortes, who, after a brilliant and successful career, during which he is said to have defeated the Persians, and to have overrun a considerable portion of Asia, was vanquished and killed by the Assyrians of Nineveh, after a reign of twenty-two years. He was succeeded on the throne by Cyaxares, who invaded Assyria, and had shut up the Assyrians within the walls of Nineveh, when his career was stopped by the invasion of a horde of Scythians from the north, who defeated the Medes, and occupied the country for twenty-eight years; when they were at length driven out by Cyaxares, who thereupon renewed operations against Nineveh, and revenged his father's death, by the capture of the capital, and the final destruction of the Assyrian empire. He reigned forty years, (including the twenty-eight of the Scythian ascendency,) and was succeeded by Astyages, the last of the Medes; who, after a reign of thirty-five years, was vanquished and deposed by Cyrus the Persian, who thereby raised his native country to the supreme power of Upper Asia, which the Medes had enjoyed for a period of 128 years.

Such is a brief and faithful summary of the circumstances related by Ctesias and Herodotus, regarding the ancient history of Assyria, which embraces nearly all the points which have given rise to the various opinions in which the subject is involved and obscured. As the leader of a great Median revolt, some writers have thought it necessary to identify Arbaccs with the Deioces of Herodotus; others have supposed him to be Cyaxares, as the captor of Nineveh, and subverter of the ancient empire of Assyria; while others have adopted other suppositions, differing from the preceding in every point,

[^65]except in their total discrepancy with cach other, and with the sources from which they profess to be derived.

Now, it is certain that, if we would attach any degree of authority to the accounts of these two Greek historians, we cannot identify the dynasty of Ctesias with that of Herodotus; that is, a dynasty of nine kings, founded 821 years b. c., and continued for 267 years, with a dynasty of four kings, founded only 710 years в. c., the sum of whose reigns did not exceed 156 years, at most. Still it is evident that the last two kings in both dynasties were the same, from the circumstance of the former of them reigning forty years, and holding his court within the walls of Ecbatana; and being moreover the father of the latter, who was the Astyages, king of Media, whose empire was subverted by Cyrus the Persian, as recorded by both Herodotus and Ctesias. We must, therefore, consider, First, -Who were these two different dynasties? and where did they reign ? And, Secondly,-How comes it, that they should both terminate with the same two princes?

Whatever may have been the expression of Ctesias, regarding the capture of Nineveh, by Arbaces, 821 years before the Christian era, it is certain that the ancient capital of Assyria was not utterly and for ever destroyed on the occasion of that momentous revolution. For not only does Herodotus positively assert, that Phraortes was destroyed by the Assyrians of Nineveh, and that Nineveh was besieged and taken by Cyaxares, in the eighth century before the Christian era, but all the Hebrew histories concur, in stating that the first invasion of the Assyrians into Israel, was subsequent to the year 769 в. c., when Menahem ascended the throne of Samaria, from which time their inroads were continually repeated, till the year 719 в. c., when Israel was carried away into Assyria. It follows, that, the dynasty of the Arbacidæ, as recorded by Ctesias, though called Median from the circumstance of the founder being a Mede, still, as being possessed of supreme power in Upper Asia, can be no other than that to which the Hebrew historians allude in all their relations of the kings of Assyria, whose capital was the great city of Nineveh. On the other hand the dynasty of Herodotus, were, as he clearly and expressly states, kings of the Medes, who, about 710 years B.c., threw off their allegiance to the sovereigns of Nineveh, and elceted Deioces to be their king. This led to constant wars between the Medes and Assyrians. In one campaign, Phraortes, the son of Deioces, was slain; but his death was revenged by his son Cyaxares, who conquered the Assyrians, destroycd Nineveh, and seized on the ancient sceptre of Ninus-torn from the weak grasp of the successors of

Arbaces, to deck the throne of the kings of Media. But Media was not long destined to enjoy the proud elevation to which the sword of Cyaxares had raised it; his son Astyages yielded to the rising fortunes of Cyrus, when the newly acquired sceptre of the Eastern world was transferred to the sway of the kings of Persia.

Here, then, we find the rccords of two different Median dynasties, and discover the reason why the last two kings of Media, as recorded by Herodotus, are also included in the list of Ctesias. The records to which this author had access, contained the list of all those monarchs, who had, from the most remote period of antiquity, enjoyed the supremacy of Wcstern Asia; of whom the Persians, when they had raised themselves to the supreme power, would justly consider themselves the successors. So long as the empire of Assyria existed, the Medes and their princes were regarded as rebels in arms against their lawful sovereigns. Deioces, therefore, and his successor Phraortes, would have no place in the chronicles of the kings of Upper Asia. But when Cyaxares, the son of Phraortes, had captured and utterly destroyed Nineveh, and had, by the subversion of the power of Assyria, raised his native country to the rank which Assyria held before; he would, as the sovereign of Upper Asia, be entitled to a place in those records, from which Ctesias compiled his history; and would be included also in the list of Herodotus, as a successor of Deioces, on the throne of Media. For the same reason also, Astyages, the son and successor of Cyaxares, would have a place in the list of both historians; and hence the circumstance of the dynasties of both terminating with the same two individuals.

This view of the subject will be simplified and illustrated by the following

> TABLE:-Showing the Series of KingS preceding Cyrus the Great, as recorded by Ctesias and Herodotud.

CTESIAS.

|  | Dymasty and Number of Kings. | $\begin{gathered} \text { Began } \\ \text { to } \\ \text { Reign. } \end{gathered}$ | Dymasty and Number of Kings. | $\begin{gathered} \text { Began } \\ \text { to } \\ \text { Reign. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | I. Assyrian of Nineveh. No. 1. Ninus $\qquad$ | $\begin{gathered} \text { B. C. } \\ 2126 \\ \\ 821 \end{gathered}$ | Media subjected to Assyria for 520 years | B. C.$1341$ |
|  | 31 or 36 Kings, to 36 Sardanapalus, overthrown by Arbaces .............. |  |  |  |
|  | . Median of Ninever |  | Medes revolt from Assyria... | 821 |
|  | 7 Kings, to 43 Artynes, overthrown by Cyaxares | 629 | No. 1. Dcioces elected King <br> 2. Phraortes. | $\begin{aligned} & 710 \\ & 657 \end{aligned}$ |


|  | Dynasty and N゙umber of Kinge. | $\begin{aligned} & \text { Regan } \\ & \text { to } \\ & \text { Reign. } \end{aligned}$ | Dynasty and Numeer of Kings. | $\begin{gathered} \text { Regan } \\ \text { to } \\ \text { Reign. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | III. Median of Ecbatana. | $\begin{gathered} \text { B. C. } \\ 629 \end{gathered}$ | Kings of Media \& Assyria. <br> 3. Cyaxares | B. C. |
|  | No. 44. Cyaxares, or Astybaras |  |  | 633 |
|  | 2 Kings to 45 Astyages, or Aspadas, overtlirown by Cyrus |  | 4. Astyages ................. | 593 |
|  | V. Persian. | 55.1 | II. <br> 5. Cyrus the Great, \&c.... | 559 |
|  | No. 46. Cyrus the Great 10 Kings to 53 Artaxerxes |  |  |  |
|  | Anemon, in whose court Ctesias lived. | 404 |  |  |

The difference of six years between these lists has already been explained in Note 1, p. 220.

In support of the system whieh is here pursued for reconciling the aceounts of Herodotus and Ctesias, I avail myseif of the authority and arguments of Dr. Russell, exhibited in Book ii., c. l., of his very able work on the Connexion of Sacred and Profane History, in which the objeetions to the several systems of Hales, Marsham, Usher, Drummond, Prideaux, Jaekson, and others, are briefly but most satisfactorily exposed. The opinions of the more ancient chronologists and historians who have treated on the ancient history of Assyria, as Eusebius, Africanus, Polyhistor, Abidenus, Syncellus, \&c., have been collected, with immense industry and researeh, in the Appendix of Clinton's Fasti Mellenici, e. 3 and 4, "On the ancient Kings of Media and Assyria;" and to those able works, and to the authorities thercin quoted and controverted, I must refer those who would enter more fully into the details of the question, while I proceed to examine those lcgends and traditions which are preserved in the pagcs of Oriental history, which, though mcagre in its dctails of all that relates to these ancient times, and partly obscured by fable and hypcrbole, has retained in its outline so striking a likeness to the icading fcatures of the Grcek accounts, that I cannot but regard it as a strong argument in favour of the authenticity and eorrectness of both.

It is supposed tliat the ancient historics of Persia were lost or destroyed in the troubled period which followed the Mohammedan invasion of Irán. Our earliest authority is, therefore, brought down to Abu Jafer ben Jarir, better known as Al Tabari, who wrote a work on Universal History about the beginning of the tenth eentury of the Christian æra. This work was ehiefly eompiled at Bagdad, and was written in Arabic; a Persian translation being the book now known as the Taríkh i Tabari. I am disposed, however, for many reasons, to prefer the authority of the great poet and historian of

Persia, Firdousi, of Tús, in Khorasan, who wrote the Shah Nameh about the beginning of the eleventh century, in which we have every reason to believe that he cmbodied all the information procurable from old manuscripts, songs, legends, and traditions respecting the ancient history of Persia. ${ }^{1}$

According to Firdousi, the sovereignty of Persia was enjoycd in very ancient times by a dynasty generally known as the Paishdadean, which was founded by Kaiomars, ${ }^{2}$ the first king of Persia, and continued for a period of 800 years, when it was attacked and overthrown in the person of Jamshíd, by an invasion of foreigners from the direction of Mesopotamia. This invasion was conducted by one Zohák, ${ }^{3}$ the son of Mirdas, thc king of the Tázís, as Firdousi calls them, who, at the invitation of a party in Irán, whom the tyranny of Jamshíd had driven into revolt, led an army into Persia, and, aided by a party of the Persian nobility, expelled Jamshíd, whom he afterwards slew, and seized upon the throne of the Paishdadean kings, which he (and his successors) are said to have retained for a period which is stated at a thousand years. At length Persia was delivered from bondage by the gallantry and conduct of a native chief named Feridún, who rose against Zohák, and after a series of

1 While treating of the Oriental accounts of Persia, I wish it to be understood that I intend, by that name, the whole country called by the modern Persians Irán. Of the Medes I am not aware of any mention being made in Oriental history. I consider them to have been a powerful tribe of the same stock as the Persians of Fars, whose name has gradually fallen into disuse since the time when Cyrus raised his native country to the highest rank amongst the nations of Irán.

2 The name of Kaiomars appears to be Sanserit, and signifies "Body of Clay," and he is called by Persian writers Gil Shah, or "King of Clay." The Parsís suppose him to be the first created being, whieh is correct with reference to the extent of their knowledge; for they have no aceount whatever of the deluge. According to the Dabistan, he is only the first of the fiftll dynasty of the kings of Persia.
${ }^{3}$ Other writers call Zohák the son of Shedad, king of Syria.-See the Zinat al Tawarikh.

* There is a circumstance connected with the history of Feridún, as recorded by the Persians, whieh I think is well deserving of attention. I allude to the story of the Dirafsh i Káwán, the famous Leather Standard of Persia. That such a standard did exist, is proved by the fact of its having been taken by the Arabs, under Saadi Wakas, the general of the Caliph Omar; but the question is, what was its origin? The Persians say it was first borne in the revolt of Feridún (the Arbaces of the Greeks), when he freed his country from the yoke of Assyria. But ean it be supposed that a standard of so peculiar a nature should have escaped the notice, not only of Herodotus and Ctesias, but also of Alexander, whose historians have preserved no mention whatever of any such a standard being borne by the Persians. Moreover Xenophon, who fought on the most momentous occasion
brilliant successes, defeated and destroyed the power of the Tazis in a great battle fought near the banks of the Tigris, whereby he not only dclivered his country from the foreign yoke and tyranny of Zohák, but raised himself to the head of the vast empire of the Tazi kings, which"stretched from Asia Minor, through Mesopotamia and Persia, to Khorasan and Tartary, and the confines of China. Feridún was succeeded by his grandson, Menucheher, who maintained in all its power and dignity the vast empire over which he ruled. But from the accession of his successor Nozar, the power of the Persian kings declined. The country was exposed to continued insults from the warlike and hostile tribes of Turán. In one campaign the unfortunate Nozar was made prisoner and slain by Afrasiab, the famous king of Turán, who ruled over Persia for a pcriod of ten or twelve years. At the end of this time, he appears to have been driven out by Zál, hercditary chief of Seistan, the hero of this portion of Persian history, who raised in succession two kings, named Zow and Kershasp, to fill the vacant throne of Persia. Little is said regarding these princes, whose reigns were short, and not distinguished by any great exploit. Peace indeed seems to have been purchased from Afrasiab, on terms, which the language of Firdousi himself would lead us to suspect were ncither honourable nor advantageous to Persia. But the weakness of Kcrshasp left the country virtually, if not actually, without a king. The people were scattered and without a head, till at length a pressing sense of their danger compelled them to unite and elect a king, when the choice of the nation fell on Kaikobad, the founder of the Kaianian dynasty of Persia.

In viewing this portion of the history of Firdousi, we must bear in mind the circumstances under which that history was compiled. It is almost certain that the list and chronicles of the kings of Persia who reigned before the time of Alexander, were lost or destroyed long before the age of Firdousi, and that nothing was left to the peoplc of Persia but the remembrance of those broad outlines of their history, which wcre sufficiently marked to fix on the memory, and to preserve in some measure a sort of connexion be-

[^66]tween themselves and the founders of their empire. It is, therefore, not likely that the names and duration of every reign would be preserved of a long dynasty of kings who had obtained a place in the page of history, solely from having sat on the throne of Persia. It is far more probable that the dynasty would be embodied in a single individual under some name, or perhaps only some royal title which was assumed by every king of the series, as the Cæsar of the Roman and Pharaoh of the old Egyptian empires. The reigns of Jamshid, therefore, and of Zohák, may be regarded as a native and foreign dynasty, of which no other details have been preserved, save only that they subsisted, the one for 700 , the other for what is termed "a thousand years." With regard to this term we should bear in mind that it is commonly used, in the idiom of Persia, to represent any great and indefinite quantity. Thus the Bulbul is called Hazar Dastán, " of a thousand tales," from the great variety and compass of its notes. So also a large double flower is called Hazar Beng, or the flower of " $a$ thousand leaves," to which many other instances might be added. The thousand years, therefore, of the reign of Zohák, means nothing more than that Persia was subjected to a foreign yoke for a very long but indefinite time.

The statement of Firdousi then, is simply this:-That the Persian monarchy had subsisted for a period of 800 years, when it fell before the arms of a foreign power which came from the west, in the direction of the Tigris, and was called by the name of Tazi, or Arabian. ${ }^{1}$ That it remained subject to a foreign rule for a very long
${ }^{1}$ There can be little doubt that these Tazis were Assyrians. Some Persian authors indeed assert that they eame from Nineveh; and Firdousi countenanees this assertion by saying, that when attaeked by Arbaces, they made a final stand on the banks of the Tigris, aud were ehased by the Persians aeross that river, whieh we may therefore suppose to have been in the heart of their native eountry. It is worthy of remark, though it need not surprise us, that the Persian historians appear to have known nothing of the Assyrian empire under that designation, though it is ineorreetly stated by a great Orientalist, that " Mohammedan writers lnew nothing of Ninevel." The Arab geographers eall it Niuweh, giaj, and say it was a city of the highest antiquity. The author of the Rouzet al Safa calls it by the same name, and says it was the capital of Mesopotamia. They have preserved, however, distinet aecounts of the existence of a great power in aneient times on the banks of the Tigris, and have recorded some eireumstances eonneeted therewith, as related in the writings of the Hebrew historians. The invasion of Israel is mentioned, but the leader of it is called Punkun, king of Mesopotamia ; and the destruetion of the Assyrians before the walls of Jerusalem is described as in the Hebrew, exeept that by the Persians a wind is represented as the instrument of the Divine wrath employed against the idolatrous hosts of Assyria. With regard to the term Tazi, it is synonymous with Arab, and is applied to men, dogs,
period of ycars, when it was freed by the gallantry of a native ehiet named Feridún, who not only delivered his country from bondage, but raised himself to the head of the Tazi empire. That in the course of two or three generations the country fell into a state of confusion, and was for some time without a king, when the people elected a chief named Kaikobad to fill the vacant throne of Persia, who became the founder of a race of kings which subsisted till the time of Alcxander the Great.

It is impossible to read this account of Firdousi, without being struck by its near agreement with the statement of the Greeks. By the reign of Zohák is evidently intended the Assyrian dynasty, which ruled over Persia for a period which Herodotus enabels us to determine at 520 years. The Feridún of Firdousi, who subverted and usurped the Assyrian power, is thus identified with the Arbaces of Ctesias, which gives, as the time of his elevation to the throne, the year b. c. 821. And the Kaikobad of the Persians, who lived about four generations after Feridún, and was called to the throne by the people of Persia when they felt the want of a sovereign head, is thus identified with the Deioces of Herodotus, who was raised to the throne of his native country under exactly similar circumstances, in the year 710 before the Christian era. ${ }^{1}$
horses, \&e. of Arab extration. Or the two words it is the most comprehensive, and was applied, I eonsider, by the ancient Persians to the people of Mesopotamia, Syria, Irak i Arabi, and Arabia, who spoke the Arabie, or some cognate dialeet, (whieh I regarl as having been the language of the Assyrians,) in the same manner as the term Feringi is applied indiscriminately to all Europeans, (save those of Turkey, ) by the Persian writers of the present day.
${ }^{1}$ With regard to the connexion between the Greek and Persian aceounts of the sueeessors of Deioees or Kaikobad, I would refer to the exeellent summary of the Kaianian dynasty of the Persian kings, eontained in chap. iv. aud vii. of Sir John Maleolm's IIistory of Persia. Aeeording to this, the Deioees and Phraortes of the Greek historians are identified with Kaikobad, and a king whose name Firdousi has not reeorded, but who is ealled by the author of the Majmah al Tawarikh, by the name of Aphra, which nearly agrees with the Phraortes of the Greeks. The Cyaxares and Astyages of the Greek writers are both represented by the Kaikaus of the Persians, whom some eall the son and some the grandson of Kaikobad. Kaikosrou, is Cyrus, the founder of the Persian dynasty of the Greeks. From this period we are not able to identify with certainty the sueceeding kings till we arrive at Artaxerxes Longimanus of the Greeks, whose name alone is suffieient to identify him with the Ardeshir-Dirazdast, or Long-handed, of the Persians. The interval is filled up by the Greek historians with the reigns of Cambyses, Darius Hystaspes, and Xerxes, and the short usurpation of Smerdis-Magus and Artabanus. Some writers have thought proper to eall in question the reigns and exploits of these prinees, but their reasons for so doing are very insuffieient, and the light lately thrown on this portion of history by the inseriptions on the temples and

These great points being determined, it is easy to account for the apparent discrepancies which appear in the details of the several historians. With regard to the difference between the accounts of Herodotus and Ctesias, it has already been explained by showing that these historians were treating of two separate and distinct dynasties; and this explanation has been confirmed by the authority of the native histories of Persia. But before entering on further details, I will take a brief notice of the history of the Assyrians, as preserved in the sacred writings of the Hebrews.

The Scriptures make no mention of the Assyrians, from the time of their first establishment by Ashur, till the eighth century before the Christian era, if we except the casual notice of them by Balaam when he was called upon to curse the children of Israel, ${ }^{1}$ and a king of Mesopotamia, mentioncd in the Book of Judges, c. iii. v. 8, whom I consider to be king of Assyria. But about the year 769, when Menahem had seized upon the throne of Samaria, we find it recorded that, "Pul, the king of Assyria, came up against the land, and Menahem gave Pul 1000 talents of silver that his hand might be with him to eonfirm the kingdom in his hand." ${ }^{2}$. Menahem was succeeded by his son Pekahiah, who was slain by the conspiracy of Pekah, the son of Remaliah, the captain of his host, who seized upon the throne b. c. 757. "And in the days of Pekah came Tiglathpileser, king of Assyria, and took Ijon and Abel-beth-maachah, and Janoah, and Kedesh, and Hazor, and Gilead, and Galilee, all the land of Naphtali, and carried them captive to Assyria." ${ }^{3}$ He also went up against Damascus and took it, and carried the pcople of it captive to Kir, and slew Rezin, the king of Syria. ${ }^{4}$ In the year 737, "Hoshea, the son of Elah, made a conspiracy against Pekah, the son of Remaliah, and smote him and slew him, and reigned in his stead." ${ }^{5}$ After an interregnum of nine years, " against him came up Shalmaneser, king of Assyria, and Hoshea became his servant,
monuments of Egypt, bear ample testimony to the truth and correetness of the aecounts which we have reeeived from the Greek authors. The Persians have preserved the names of two kings only during this period; the first named Lohrasp, whom I eonsider to be Cambyses, the second Gushtasp, who was probably the Darius of Greek history. The Isfandiar of the Persians, the son of Gurshasp, was probably the famous Xerxes of the Greeks. He was probably ealled Shahinshah, or king of kings; the eommon title of the kings of Persia, whieh the Greeks may be supposed to have Hellenized into Xerxes. The Persian Sh $\dot{\sim}$ being always represented in Greek by X. Herodotus, I know, derives the name from є $\rho \xi \in i \eta s$, "The Warlike."

and gave him presents; and the king of Assyria found conspiracy in Hoshea, for he had sent messengers to So, king of Egypt, and brought no present to the king of Assyria as he had done year by year, thercfore the king of Assyria shut him up and bound him in prison. Then the king of Assyria came up throughout all the land, and went up to Samaria and besieged it three years. In the ninth year of Hoshea, the king of Assyria took Samaria, and carried Israel away into Assyria, and placed them in Halah, and in Habor by the river of Gozan, and in the cities of the Medes." ${ }^{11}$

Such is a brief summary of the accounts preserved by the kings of Assyria in the Hebrew historics, from the time of their first invasion of Isracl, down to the capture of Samaria by Shalmaneser, from which we are enabled to fill up in some mcasure the imperfect accounts of the Greck historians, who have related but little of the four princes who succecded Arbaces, except their names and the duration of their reigns. ${ }^{2}$ Arbaces, as we have seen, ascended the throne в. c. 821 , and was succecded by Mandauces, the end of whose rcign may be placed about the year 773. Of these two princes no mention is made in the Hebrew scriptures, and Ctesias has rccorded but little regarding them. He tells us that Arbaces destroyed Nineveh, couferred on Belesys the government of Babylonia, and established himself in Ecbatana, all which I see no reason to
${ }^{1} 2$ Kings xvii. 3-6.
${ }_{2}$ The following passage from Dr. Russell will show the chief points in which I admit, and in which I differ from the authority of his opinion.
"If I be right in this eonjecture, it will follow that the four monarchs, who in scripture are called the ' King of Nineveh,' Pul, Tiglath-pileser,' and Shalmaneser, and who by Ctesias are denominated Arbaces, Mandauces, Sosarmus, and Artycas, are respectively the same persons; and that they were in fact, Assyrian kings who had sprung from a Median family. As yet Assyria, Babylonia, and Media, were under the same crown, and it was not mutil the year B.c. 711, that the people of the last-named country, who were dissatisfied with the imperial government, revolted from its authority, and made preparations for the establishment of an independent sovercignty in their own land. After a certain period of anarchy, Dejoees was elected king; and at this point commenees the Median lingdom properly so called Aceording to the views which we are now following, there were sovereigns of Median extraction on the throne of Eebatana, as well as that of Nineveh."

Now aecording to Dr. Russell (Book ii. chap. 1.) Arbaees aseended the throne of Nineveh в. с. 821 , and, after a reign of twenty-eight years, was sueceeded by Mandauces, who reigned twenty years. The end of his reign will therefore be about the year b. c. 773. Again, Dr. Russell himself shows (Prelim. Dissert.) that Menahem ascended the throne of Samaria b. c. 769, in whose reign Pul invaded Israel. I consider, therefore, that in the above comparison of the list of Ctesias with the scriptural accounts, Dr. Russell has committed an error, and think that he would himself acknowledge the correctness of the system here advanecd.
dispute. We cannot suppose that after such a revolution, the Median usurper found the throne of Ninus an undisturbed possession. There was little, however, to fear in the west, which was awed by the presence and talents of Belesys, whose honour and whose interests were alike engaged to put down any insurrection in the western provinces. But it was otherwise in the eastern parts of the empire, and the central situation of Ecbatana would naturally recommend it to the Median chief, as the place best adapted for his camp and his capital, till he had forced the warlike tribes of the north to acknowledge the successor of their former masters. Whether he remained there for the whole period of his reign, or returned to the ancient capital of the empire, we cannot determine from the records of history. It is probable, however, that both he and Mandauces, whom I hold to be the Menuchcher of the Persians, were long detained in their Persian provinces, perhaps in reducing the tribes of Turán, which accounts for their celebrity in the annals of Persia, and,for the silence of the Hebrew writers respecting them. Mandauces was succeeded by his son Sosarmus, who, according to Ctesias, ascended the throne about 773 years b. c. Two generations would have amply sufficed to secure and establish the Median dynasty; and hence we might expect, that the same spirit which had raised his fathers to the throne of Assyria, would, when all obstacles were overcome, urge a young king to further conquest.

In perfect conformity with what is here supposed, we find that during the reign of Menahem, which commenced in 769, a king of Assyria invaded Israel. This king is called Pul in Hebrew history, and must, from the time in which he lived, be the same as the Sosarmus of the Greek historian. The next king of Assyria mentioned in Scripture, is called Tiglath-pileser, or Tiglath-pileneser, who reduced Syria, invaded Israel, and carried away captive the tribes of Gad and Reuben, and the half-tribe of Manasseh, as recorded in 1 Chron. v. 26. This is generally supposed to have occurred about twenty years before the fall of Samaria, or about the ycar 740 в.c. Now, according to Ctesias, Sosarmus died in 743, and was succeeded by Artychas, who is thus identified with the Tiglathpileser of the Hebrews. The next king mentioned, is Shalmaneser, who invaded Israel, and took Samaria, about the year b.c. 719, who must, therefore, be identified with the Arbianes of Ctesias, who ascended the throne on the death of Artychas.

It may, however, be objected to this, that the history of the successors of Feridún in Persia, according to the records of the native historians, differs entirely from the account here given of the con-
quests of the warlike princes of Nineveh. This difference, I think, may be explained as follows. It has already been shown that I consider the Arbaces and Mandauces of Ctesias, to be the Feridún and Menucheher of Firdousi; and, also, that it is likely they were long engaged in establishing security and peace in Persia. Now Firdousi tells us, that Feridún, some time before his death, divided his empire among his three sons, leaving to each a separate and inde-pendent kingdom. These sons, however, were all cut off in a great civil war, before the death of their father Feridún, and the empire, therefore, devolved entire upon his grandson and successor, Menucheher. We may hence suppose that this prince adopted a similar policy, (it has becn followed by all the greatest conquerors in the East, as may be seen in the instances of Jengiz Khan and Timur,) and that he, perhaps, on his return from Persia, and the restoration of the ancient capital of Assyria, divided his kingdom, which extended from the shores of the Mediterranean, to China, giving Persia to Nozer, ${ }^{1}$ and Assyria to Sosarmus, as two separate and distinct principalities. Hence, the Persians, in speaking of the successors of Feridún and Menucheher, would allude to that branch of the family only, which succeeded to the throne of their native country; whose calamitous career, as related by Firdousi, fully accounts for the state of confusion, which Herodotus and the Persians describe as the cause of the election of Deioces, or Kaikobad. In like manner, Ctesias and the Hebrew writers would have known of no other successors of Mandauces, than those who succeeded to the throne of Nineveh. We need not, therefore, be surprised that the accounts of the writers of the He brews and the Persians are on this point at variance with each other; nor need we be reduced to the unwarrantable extreme of setting aside and discrediting a grand national history, merely because it differs in some of its details, from another history with which we would identify it, and from which, in great measure, it is separate and distinct.

With regard to the kings who succceded Shalmaneser on the throne of Nineveh, there is some difficulty in reconciling the accounts of Ctesias and of Scripture, inasmuch as there is nothing recorded by the Grcek in any way analogous to the short and disastrous

[^67]reign of Sennacherib, the son and successor of Shalmaneser. According to Scripture, Sennacherib succeeded to the throne of Nineveh about the year в.c., 712, and was assassinated by his sons not long after his return from Israel, about two years after his accession. According to the Greeks, Arbianes was succeeded on the throne by Artæus, who enjoyed a long reign of forty years. Now if we suppose that there was something illegal in the elevation of Sennacherib to the throne of Assyria, it will at once account for the absence of his name from the Assyrian archives, and the consequent silence of Ctesias on the subject, and will restore the harmony which has hitherto been observed betiveen the Greek and Hebrew histories. And we find recorded many circumstances which strongly favour this view of the case. It is evident from many parts of the Scripture, that during the short reign of Sennacherib, the affairs of Assyria were in a vcry troubled and confused state. The Assyrian armies were destroyed before Jerusalem. Media was a prey to anarchy and revolt; and rebellion raged within the walls of Nineveh, till Sennacherib himself fell a victim to its fury. This state of affairs would naturally be seized on by the neighbouring nations to assert and establish their own independence. The Medes raised themselves into a kingdom, and the Babylonians ${ }^{1}$ (who we know were subject to Shal-maneser-they had probably been subdued by Tiglath-pileser ${ }^{2}$ ) sent messengers to Hezekiah, king of Judah, as if they wished to make a league against the common enemy. If, then, we suppose that the elevation of Sennacherib to the throne of Assyria was violent and illegal, and was, therefore, not recorded in the chronicles of the kings of Nineveh, we shall find the difficulties of our subject removed, and may proceed with the comparison of the lists of the remaining kings of Assyria, according to the Greek and Hebrew accounts. The Esarhaddon of Scripture, will be regarded as the legitimate successor of Shalmaneser, and will thus be identified with the Artæus of Ctesias. This prince appears to have been of a quiet and peaceful disposition. Little is said of him in Hebrew history, except that he appears to have tacitly admitted the independence of the Medes. And the only event which the Greeks have recorded to mark his long reign of forty years, is the revolt of the provinces bordering on Media, and the total defeat of the imperial armies, by a body of rcbels in the hills of Cadasia.

Artæus was succeeded on the throne by Artynas, the last of the descendants of the great Arbaces, recorded by Ctesias. His
reign is made to cease from the time of the accession of Cyaxares the Mede to the throne of Media; for though there were kings of Assyria for more than thirty years after that event, still, as Cyaxares destroyed Nineveh, and transferred to himsclf the sceptre of the Assyrians, he would naturally stand in the chronological list of the sovercigns of Upper Asia, to the exclusion of the kings whom he conquered and destroycd. Now this Artæus, who succeeded Esarhaddon, must have been that warlike king of Assyria who defeated Phraortes, king of the Medes, the Arphaxad of Judith, and must, therefore, be identified with the Nebuchadonosor of Hebrew history, who, "after having defeated and taken Arphaxad, in the mountains of Reigan, and smote him through with his darts," sent forth Holophernes, the chief captain of his army, which was next to him, " with an overwhelming force, and ordered him to go against the West country, and to be avenged on the coasts of Cilicia, and Damascus, and Syria, and that he would slay with the sword all the inhabitants of the land of Moab, and the children of Ammon, and all Judea, and all that were in Egypt, till ye come to the borders of the Two Seas, because they had disobeyed his commandments," when he summoned them to join him in his late campaign against the Medes. On the success of this expedition, history is silent; but it is highly probable that it was short and disastrous. For we learn from Judith, that Holophernes was killed, and his army, the élite of the Assyrian troops, defeated before the walls of Bethulia. The loss of this army explains the weakness in the Assyrian empire, of which Cyaxares took advantage, by invading the kingdom, as related by Herodotus. The sway of the once great kings of Assyria was already confined to the walls of Nineveh, when they were saved from ruin, though exposed to a fresh insult, by the incursion of a horde of Sythians, from the banks of the Tanais, who overthrew all that opposed their advance, drove Cyaxares into the hills of Media, and enjoyed for a period of twentyeight years undisputed possession of Upper Asia. Nineveh, itself, does not appear to have suffered from their attacks. The indiscriminate rapacity of these barbarians would be amply satiated on the spoils of the fertile provinces of Assyria, and would render them as indisposed as they were ill-prepared to waste their time in the tedious and unaccustomed operations of a siege. But twenty-eight years of luxury and indolence impaired their native strength and spirit. They ficd in thcir turn before the armies of Cyaxares, and Nineveh was again exposed to his attacks. About the year b.c. 605 , the capital of the East fell before the combined power of the Babylonians and the Medes. And the Assyrian name, and the Assyrian power, which
had flourished for 1,600 years, was cast down and destroyed for ever. ${ }^{1}$
${ }^{1}$ The utter destruction of the most powerful nations and cities of antiquity, is a striking feature in the history of the world. They appear to have been destroyed by a moral deluge, which has scarce left a vestige of their former existence. The history of Assyria, and the destruetion of Nineveh, may be cited as illustrative of this remark. The early history of this once great capital is buried in the darkness of extreme antiquity.-According to the Scriptures, it was founded by Ashur, the son of Shem, the son of Noah, about twenty-three eenturies before the Christian era. Aecording to Ctesias and the Greek historians, it was built by Ninus, in the twenty-second eentury b. c. The Greek, however, tells us that Ninus was not the first king of Assyria: we may, therefore, suppose him to have been the son or the grandson of Ashur, which will reeoneile the slight difference between the two accounts. From this early age, we have no account of the capital of Assyria, till the time of the Arbacide, in the ninth eentury before the Christian era, under whom we may suppose it attained its highest state, splendour, and prosperity. About the year b. c. 605, Nineveh was taken and destroyed by Cyaxares. But its fine situation on the banks of the Tigris, in the midst of the most fertile parts of Assyria, would make it the abode of the merehant and husbandman, although it was no longer the eapital of an empire. Accordingly we find it mentioned by Ptolemy, (L. xii.) Tacitus, (An. 13,) Dion Cassius, and others, as holding a place in their time among the eities of Assyria; and Ammianus Mareellinus (xxviii. 7,) speaks of it as a large place, so late as the middle of the fourth century of the Christian era. But the ineursions of the Huns, in the fifth century, and the wars of Justinian and Noshirwan, in the sixth, would render the fertile banks of the Tigris illadapted for the operations of agriculture or commeree. And we are, therefore, not surprised to find, that in the year 627, the armies of Heraclitus contended with the Persians for the empire of Assyria, on the ground where the capital of Ninus had stood. In the words of the propheey denouneed against her, "She had beeome a desolation, and dry-like a wilderness-a plaee for beasts to lie in." Sinee that period, Ninevel, like Babylon, has remained desolate. Still, in her desolation, she has retained the vestiges of her former greatness. The ruins of her walls, and towers, and palaces, lie along the Tigris, more like the works of nature than of man; and offer, in the silent solitude of the desert, an eloquent example of worldly vieissitudes, but an imperishable monument of the grandeur and magnificence of the eapital of Assyria. And the fate of Eebatana is no less striking; were it not that its position is determined by the accounts of aneient writers, there is little to show us, that the modern open town Hamadan, is the remains of the onee magnificent Eebatana; the town which Semiramis adorned with aqueducts; whieh Deioces encireled with a sevenfold wall; whieh the suecessors of Alexander, and the Parthian kings long preserved as a royal city. Bochart has advanced a strange opinion respeeting the derivation of the word Eebatana. Alluding to the sevenfold wall of Deioces, each wall of which is said to have been of a different colour, he observes :-" Ab hâc colorum varietate putaverim Ecbatana dicta, quia Arabieè hodie תבУㅄ id ipsum signifieat. Giggeius תコปאלא Al Agbatha, vario eolore distinctus fuit." Now, setting aside the question of an Arabic derivation for a Median town, I would observe, that Agbatha $\dot{H} A \dot{s} \mid$ does not mean "particoloured," but "dust'or briek-coloured." Thus, according to the Kamús, it means $\therefore$ :

Before taking leave of the subject, I cannot omit to notice another striking agreement between the accounts of the Greeks and the Persians, in regard to the period to which they refer the establish. ment of the Persian and Assyrian kingdoms. When the infant colonies of the descendants of Noah spread themselves abroad in separate parties to seek for a place wherein to settle, it is reasonable to suppose that the same causes, whatever may have been their nature or origin, which led to the institution of a sovereign authority in any one tribe or society, would have led to a similar result in another, if similarly situated, at no very distant period of time. When, therefore, we find accounts in two different and distinct histories, which fix the establishment of the sovereign authority in two neighbouring kingdoms of the highest antiquity, at nearly the same period of time, it must be admitted that the conformity of the two, is an argument in favour of the truth of them both. According to Ctesias, the empire of Assyria was founded by Ninus, more than 1300 years before the revolt of Arbaces the Mede, which occurred, as we have seen, in the year в.c. 821. And this places the establishment of the Assyrian monarchy in the twenty-second century before the Christian era. According to Firdousi, the Paishdadcan dynasty had been on the throne 800 years before the invasion of the Tazís, under Zohák, which event we have above referred to the year в.с. 1341, which gives for the establishment of the Persian monarchy the year в.c. 2141, ${ }^{1}$ twenty years only before the year assigned by the Grecks to Ninus, and these accounts are strikingly borne out by Hebrew history. From the Hebrew Bible we learn that the earth was divided in the time of Peleg, who was fourth in descent from Shem, the son of Noal. Now Peleg was born in the second century after the deluge, which, according to the chronology of the Hebrew Bible, ${ }^{2}$ was the twenty-second century before the Christian era; the

Meninski renders it, on the authority of the Wan Kuli, "Pulverulento quasi colore preditus," and the Persian lexicographers represent it as a colour produced by mixing black and red, which we all know produces a brown.
${ }^{1}$ The foundation of the Egyptian monarchy may also be referred to the same period. The accession of Mencs, the first king of Egypt whose reign appears to be authentic, is fixed about the latter end of the twenty-third century b.c. Eusebius places it in the ycar b. c. 2258; Julius Africanus in 2218. (See Hales, Analysis of Ancient Chronol.) Dr. Pritchard gives the ycar 2214 for the same event. (See Egyptian Antiquities.)

* According to the Chronology of the Hebrew Bible, as calculated by Usher, the Deluge occurred 2348 years before the Christian era. Playfair makes it 2351. A much longer period is assigned by the Greek and Samaritan versions, which I consider to be incorrect.
very century to which the Greeks and Persians refer the establishment of the ancient empires of Persia and Assyria. And there is another circumstance worthy of being noted. Peleg, according to the Hebrew history, was the son of Eber, the son of Salah, the son of Arphaxad, the son of Shem. Kaiomars, the first king of Persia, was, according to the author of the Jehán Ará, the son of Delawad, the son of Amin, the son of Arphaxad, the son of Shem, which makes him exactly cotemporary with Peleg, "in whose time the earth was divided." I consider Ninus to have been cotemporary with Kaiomars, to whom Assyria was allotted in the division of the earth. He was probably the grandson of Ashur, the son of Shem, from whom his kingdom was called the Assyrian.

Bombay, April, 1836.

## PART II.

ON THE FATE OF THE TEN TRIBES OF ISRAEL AFTER THE FALL OF SAMARIA.
"And God stirred up the spirit of Pul, king of Assyria, and Tiglathpilneser, king of Assyria, and he carried them away, (even the Reubenites, and the Gadites, and the half-tribe of Manasseh,) and brought them unto Halah, and Habor, and Hara, and to the river Gozan, unto this day."--1 Chron. v. 26.
"And in the ninth year of Hoshea, the king of Assyria (Shalmaneser) took Samaria, and carried Israel away captive into Assyria, and placed them in Halah, and in Habor by the river Gozan, and in the cities of the Medes."-2 Kings xvii. 6.

Such are the accounts which history has preserved of the destruction of the Hebrew kingdom of Samaria, and of the carrying away into captivity the ten tribes of Israel by Pul, Tiglath-pilneser, and Shalmaneser, the kings of Assyria. The statement itself is distinct and indisputable, but involves two questions in addition to those already discussed, which are still obscured by much doubt and uncertainty. These questions arc, first, "Where were the captive Israelites deposited?" and second, "Where are, or what has become of their descendants?" The consideration of these questions is the subject of the present part of this inquiry.

Now in order to arrive at a satisfactory conclusion on the first of the questions above stated, it is highly necessary that we clearly understand those passages of scripture from which is derived all our information regarding the subject now under discussion. ${ }^{1}$ It will be seen by a reference to the several versions of the Hebrew text, that commentators and translators are by no means unanimous as to what is the true meaning of the passages in question. And since to every impartial inquirer, it must be a matter of considerable importance to know the exact sense of the original, to ascertain what the names preserved in Scripture are intended to represent, whether towns, or countries, or districts, or rivers, before he can proceed to identify them with places now existing, or preserved in authentic works on geography, I will offcr a few brief observations on what I conceive to be the meaning conveyed in the words of the Hebrew Bible.

There are two passages in the English version which I cannot but regard as decidedly objectionable. The first of these is in the 1 Chron. v. 26, where the words ${ }^{3}$ are rendered "the river Gozan," from which it would seem that Gozan is to be understood as the name of a river. But in Hebrew the two substantives are placed in construction, as is shown by the punctuation, and therefore the latter must be, as we say, in the genitive case. According to this the passage would be rendered the "River of Gozan," making Gozan the name of a town or country ; and this view of the question is supported by other passages of Scripture, in which Gozan is mentioned as the name of a place. Thus, in 2 Kings xix. 12, Sennacherib alludes to it as one of the places which his ancestors had reduced. "Have the gods of the nations delivered them which my fathers had destroyed, as Gozan and Haran ?" \&c. From all which it must, I think, bc inferred, that Gozan was the name of a town or country, and not of a river, as would appear from the reading in the English Bible.

[^68]The other passage to which I object, is in 2 Kings xvii. 6. The text is בהבור נהַר גוזן, which is rendered in the English Bible "Habor, by the rivcr of Gozan," where the particle "by" is introduced without authority ${ }_{2}{ }^{1}$ there being nothing to correspond therewith in the original. The interpretation is simply, and cannot with propriety be other than this, "To the Habor, the river of Gozan," which, as we have seen, was a town or country.

As regards "Halah," there are no means for ascertaining precisely whether it is the name of a town or of a river. It may in both passages be understood as either; but from the manner in which it is coupled with the Habor, where that is called the river of Gozan, I should rather be induced to regard it as a river. The Greek translation called the Septuagint, seems to take this for granted, and
 the Halah, and about the Habor, rivers of Gozan," which, although it is not a literal version, must I think be regarded as substantially correct.

As to Hara, it may bc observed that there is some controversy about this name. Ushcr reads it Haran, and identifies it with the Haran of Genesis xi. 31, and of 2 Kings xix. 12, in which place it is also, as in the present instance, associated with Gozan. I am therefore disposed to assent to the opinion of the learncd prelate above mentioned, especially as some Arabs, to whom I have mentioned the name Hara, have not hesitated to identify it with the well-known Haran of Mesopotamia; I think it not unlikely, that, at some period of its history, this town was known by the name of Hara, for the Greeks and Romans always wrote it $X a \rho \dot{\rho} \dot{\rho}$, and Charræ, which would hardly have been done had the place been called Haran, with the final $N$. as fully sounded, as in the ancient Hebrew and modern Arabic names.

These remarks will suffice to show how in my opinion the passages before us ought to be understood and translated. I will therefore proceed to make some remarks on the opinions which are at present generally entertained regarding the situation of those places
${ }^{1}$ The cause of the introduction of this particle is obvious. By the literal interpretation, "Habor, the River of Gozan," Habor is identified with the river of Gozan; to which it was objected, that in the other passage above quoted from 1 Chron. v. 26, Habor and the river Gozan are separately mentioned, as two different localities. But when it is considered, as will be shown in the sequel, that the Habor is actually the river of Gozan, and also that a town and district in the vicinity of that river are known by the same name, it will be evident that the liberty taken with the text is as needless as it is improper.
to which the captives of Israel were carried, and to show the insufficiency and inconclusiveness of the arguments upon which they are generally supported. It would be a task as useless as uninteresting, to take a review of the several opinions of the many writers on this controverted question ; and as the objcctions I have to make apply not so much to the details of any particular case, as to the method which has becn pursued in all, I will confine my remarks to a single example, and for this will select the hypothesis of Bochart, in consequence of the publicity it has generally acquired from having been adopted, in toto, by Wells in his Geography of the Bible, and by Patrick in his Commentary on the Old Testament, in reliance on the opinion of that celebrated Orientalist.

According to Bochart, the captives from Isracl were carried to Calachena, ${ }^{1}$ a town in the N. E. of the Assyrian empire; to Chaboras, a mountain, and Gauzania, a town still further to the north, in the direction of the Caspian, and to Aria, which he supposes to be put for Media, that is to say, towards the modern provinces of Azarbijan and Khorasan. It appears that the grounds on which Bochart has procceded to identify these places with those mentioned in Scripture are, first, a certain similarity in name, and secondly, the circumstance of their being, as he makes them, "Cities of the Medes." With regard to the latter part of the argument, which appears to have becn regarded as a point of great importance with almost every one who has written on the subject, it is necessary to observe, that there is nothing whatever in the Scripture accounts from which it can be argued that the places there mentioned must be regarded as identical with the cities of the Medes. The copulative conjunction does not require that the things which it is applied to connect together, should be identical or synonymous with each other. On the contrary, if any argument can be drawn from a grammatical analysis of the passage in the text, it would be that Halah and Habor, \&c., were other places than cities of the Medes; for a conjunction joins things not identical but different. With regard, however, to the similarity in name, not only is this incomplete and far-fetched, but, supposing it to be much more perfect than it is, we should find that it would not of itself be an argument to establish the identity of any onc particular place, with any of those mentioned in Scripture history. For in the maps of the old Assyrian empire, and in the

[^69]very same pages of Ptolemy's Geography which contain the names which Bochart has selected, we find Caberasa, Chalcis, Gasina, and Coana; and of Chaboras, Chalcitis, Gauzania and Charre ; of Colchis, Iberia, and many others which bear a resemblance at least as near to those in our text, as the mountain Chaboras, Calachena, Gauzania, and Aria, above mentioned. It is evident, therefore, that a mere similarity is not of itself by any means conclusive, in favour of any particular place; there must be a probability on other grounds (as well as this, which is also necessary), the want of which, in my opinion, constitutes a great and fundamental objection to the arguments of Bochart, and of every other writer on the subject.

We have seen that at the time of the capture of Samaria, not long before the elevation of Kaikobad, the Persian monarchy was in a state of utter anarchy and confusion, subject to constant inroads from the tribes of Turán, who were only checked by the conduct of Zál, and the gallant chiefs and warriors of Seistán. It is, therefore, improbable, as opposed to the whole tenour of Persian history, to suppose that at that period a king of Assyria would have meddled at all in the affairs of the north-eastern provinces of Persia, particularly as we learn from Hebrew history, that so much of the attention of the Assyrian armies was turned at that time towards the kingdoms in the west, which afforded, it is probable, not only a more easy, but a more valuablc conquest, than could be wrested from the warlike tribes in the north. It is no less improbable that a king of Assyria should have carried away a whole nation of captives, across countries so arid and so difficult to traverse as the plains of Mesopotamia, and the rugged mountains to the north of Assyria, to place them in the remote and turbulent provinces now known as Azarbijan, Khorassan, and Seistan. Nor is this objection much diminished, if we admit the supposition of Rennell and others, that

[^70]a portion of the nation of Israel only, consisting of fighting-men, artificers, \&c., were carried away captive into Assyria. But this opinion is purely conjcctural, and opposed to the whole tenour of Scripture history. Other objections might also be advanced against the hypothesis now under discussion, but as I have said that I object chiefly, not so much to any one hypothesis in particular, as to the insufficient grounds on which they all are established, I will not dwell on this point any longer, but proceed to point out those localities to which it seems probable that a king of Assyria would, in the then state of the Assyrian empire, have carried a nation whom he had expelled from Samaria.

It has already been shown, in the preceding part of this inquiry, that Arbaces the Mede ascended the ancient throne of Nineveh about the year 821 before the era of our redemption; and that he was succeeded by Mandauccs, who died abont the year 773. These two princes we have alrcady identified with the Feridún and Menucheher of Persian history ; and have shown, from a comparison of the several records which treat on the subject, that it is as evident as it is probable, that the latter prince pursued the common policy of Oriental conquerors, by dividing his empire among his sons, and that, therefore, the histories of Persia and of Assyria are henceforth to be regarded as separate and distinct. Mandauces was succeeded in Assyria by Sosarmus, and this prince and his successors, Artycas and Arbianes, must be identificd, as we have seen, with the Pul, Tiglath-pilneser, and Shalmanescr, of the Hebrews. ${ }^{1}$ We are distinctly informed in the sacred history, that Tiglath-pilneser, not long before the invasion of Israel, had conquered Syria, and carried away the inhabitants in bondage to Assyria. And we are likewise told that, on the reduction of Samaria, Shalmaneser brought men from Babylon and Cuthah, and the adjoining countries, to place in the lands of the children of Israel. ${ }^{2}$ Now we learn from Ctesias, that

[^71]on the elevation of Arbaces, the province of Babylon was awarded to Belesys, as an independent principality, to be held by him, without the payment of tribute, as the price of his assistance in the revolution by which Sardanapalus was deposed. It is, therefore, evident that the kings of Assyria could not have interfered with the affairs of Babylon, unless in their career of conquest in the west, under the warlike successors of Arbaces, they had invaded and reduced that country also, when they would naturally pursue the same course with its inhabitants, which we are informed that they adopted towards the Israelites and Syrians. We read, moreover, in the blasphemous message of Sennacherib to Hezekiah, king of Judah, that Haran also, and the adjoining parts of Upper Asia, had fallen before the tide of Assyrian invasion, from which we may infer that the inhabitants of that part of the country also, shared the common fate of a conquered province, and were driven in exile to a foreign country. The devastating influence of such wars, and such a policy, in a region so arid as that part of Mesopotamia, would have left a desert between the Tigris and Euphrates, which could not have been crossed by a whole nation of captives, but which it was the obvious policy of the Assyrians to restore to cultivation, by the introduction of a colony from a foreign land. Had people been brought from Babylon or Assyria, the immediate vicinity of their native country would afford them too great facilities for escape. The same objcction would have made it unsafe to leave the Israelites in Damascus, and the adjoining cities of Syria. And hence we must conclude, that Mesopotamia was the place, to which it is most probable that a considerable portion of the captives of Samaria were driven in bondage by the kings of Assyria.

In the well-known geographical work of Edrisi, it is stated, ${ }^{1}$ that
name.) Hamath, $\boldsymbol{T}$, is preserved without variation in the Syrian town of Hamah, or Hamat. $\mathrm{r}_{\mathrm{S}}$ and Sipharvaim may be traced in the Sipphara of Ptolemy, situated in Babylonia, not far above Babylon. Sipharvaim, it may be remarked, is in the dual number; the singular is Siphara, or Sipharva. The Sipphara of the Greeks lay on the left bank of the Euphrates, and, it is probable that the district extended to the opposite bank of the river; hence, keing divided into two portions, it would with propriety be called Sipharvaim, or the two Sipharas.
${ }^{1}$ The words of the Geographer are,--

"And from Al Habor to Karkasiah is two marches; and Karkasíah is a town on the east bank of the Euphrates, and under it flows the Hermas, commonly called Al Habor."
about 250 miles west of Bagdad, near the left bank of the river Euphrates, stands the town of Al Habor, marches further to the westward is a river, the only one of size in Mesopotamia, which comes down from the north, and falls into the Euphrates, at Karkasíah, the Circcsium of the Roman geographers. The name of this river is Hermas, ulogefl but says our
 Habor, which name, he also tells us, is extended to the district, stretching for miles along the banks of the river. Not many miles west of the source of this stream, stands the ruined, but well-known
 ancient geographers. About fifty miles from Karkasíah, up the Habor, at its junction with another stream, stands the town of Naharain, زهرإ jor, "the Town of the Two Rivers." The one is the Habor, which flows down to Naharain from a westerly direction. The other is called Al Hálih الحاكالي and Halah by the Arabs, and the country on its bank is called by Ptolemy Gauzanitis Tav̧avīts. When, therefore, in the very places where we have seen it is most probable that the Israelites were deposited, we find every name recorded in Scripture so little changed in the lapse of centuries, we may, I think, rest satisficd, that we have ascertained the locality in which the captives from Samaria were placed.

It remains, then, to notice " the cities of the Medes," of which a general mention only has been rccorded, as if they were places more remote and less known than Haran, and the ncighbouring parts of Mesopotamia, and which cannot, I think, be properly understood in any but a plain and literal sense, -that part of the captives were carried into Media. It is distinctly stated in the history of Tobit, that in the times immediately subsequent to the capture of Samaria, several familics of the Israelites were settled about Nineveh, and in Rages, and Ecbatana, and other cities of Media; and cven had this cvidence not been preserved, a consideration of what was the obvious policy of the Assyrians, would lead us to suppose that some such distribution of the captives would be made. Experience had shown

It appears that the Jews of Mesopotamia entertain an idea, that these are the sites to which the captives of Samaria were carried. And it is remarked by the Rabbi David ben Hillel, in his travels through Mesopotamia, that, "about two hours' distance from Nisebbin, I passed a small river which the Israelites call Halah, which comes from the mountains. The Arabs call it Al Hali. It appears to me that it is the same river which is mentioned in $2 \mathrm{Kings} x \mathrm{xii} .6$. because it is very near the cities of the Medes, and the river Hóvor is not far from it.".
them that misfortune and adversity could not reduee the proud spirit of the children of Israel; a three years' siege of Samaria bore witness to the obstinate nature of their courage; and it is, therefore, not likely that the eonquerors would introduce them into the heart of the Assyrian empire, without taking the preeaution of breaking those bonds of union and nationality, on which the strength of the Israelites so vitally depended, for which no means could be more easy and more effeetual than the dividing them among the distriets of Mesopotamia and Media, with the armies of Nineveh interposed between them.

We have thus arrived at the seeond question proposed for eonsideration, as to what has beeome of the descendants of the eaptives: a point on whieh history is unfortunately silent. Had there been only one dispersion of the ehildren of Israel, we might have been enabled, with less data than we aetually possess, by the sole means of physiognomy and language, to traee their deseendants among the nations of the earth, or be eertain that the objeets of our seareh were no more. But in the case before us, we require some means to distinguish the objeets of our inquiry, from those of the same nation, who were subsequently earried off, or dispersed in all direetions, when Jerusalem was taken by Nebuehadnezzar, and subsequently by the armies of the Roman emperors. But history is silent, language and physiognomy are evidently ineffeetual, and there is, therefore, nothing to which we ean look, to guide us in the wilds of speeulation and eonjecture, but the faint and uneertain glimmer of tradition.

But in this instance, tradition fails us; for we do not know of a tribe or people, who have preserved a tradition, or of whom a tradition has been preserved by others, that they are deseended from the eaptives of Israel. ${ }^{1}$ But since there are eertain opinions and speeulations, which have obtained from the great names with whieh they are assoeiated, a eonsiderable degree of publicity and belief, although they are devoid of any real foundation, it may be satisfactory, while treating on the subject, to take them briefly into consideration.

The opinion whieh has gained most general notoriety, from the manner in whieh it has been advaneed by Sir W. Jones, is that

[^72]which supposes the fierce tribes of Afghanistan to be the descendants of the captives of Samaria. Now it is to be observed, that in the histories and traditions of the Afgháns, upon which it is supposed that this opinion is established, there is $n o$ mention whatever of Samaria, or of the Assyrians. On the contrary, according to their own traditions, the Afgháns are descended from the captives of Jerusalem, who were taken, when their country was overrun by Nebuchadnezzar, and placed about Ghour and Kandahar, whence they took their present name, from one Afghana, a sun of Saul, from whose family they claimed descent. Now it is clear, that this story, supposing it to be authentic, does not warrant the conclusion that the Afgháns are the descendants of the captives of Samaria. And there are no other traditions whatever on the subject; nor other grounds upon which this hypothesis can be supported. So that it is, in fact, opposed to those very histories and legends, upon which alone it rests for its support.

Another opinion, is that which has been advanced by Major Rennell, in his Geography of Herodotus, where he states, on the authority of Josephus and Abulfeda, that therc were, in ancient times, several settlements of Jews scattered throughout Media and the adjoining provinces; and one in particular, which was called Jahúdia, which he supposes to have been established by the captives of Samaria. Now the settlement, as is stated, was called Jahúdia, or the Place of the Jews ; and this is an argument that the captives of Judah, not those of Israel, were the original founders of these Jewish colonies; as the Israelites would never have called a town which they founded, by the name of that tribe from which they had separated, and with whom they were engaged in constant hostility. Had the inhabitants of these early settlements called themselves Israelites, or children of Israel, an argument might be found in favour of this opinion; but as it is, the argument is against it.

Another opinion, and which I myself have heard expressed by well-informed Jews, both of India and Arabia, is founded on a tradition, which scems to be current among the Jews in the East, that the ten tribes of Israel are still in existence, somewhere beyond a river which they call "the river of tribes," which they say is situated in a north-easterly direction, beyond the confines of Tartary and of China. Although it is probable that this opinion rests on no other, or no better foundation, than the belief entertained so fondly by the Jcws, that their kingdom will be restored on the advent of the Messiah, when the lost tribes will be brought back, and re-established in Jerusalem, it is curious nevertheless, and worthy of attention, from
its conformity with an opinion once so generally received, which would derive the several tribes of North American Indians, from an Hebrew origin. ${ }^{1}$ It is certain, and for the cause of knowledge it is to be regretted, that when the idea of tracing the wanderers of Israel to the wilds of the new world first suggested itself to the early settlers in America, it was, from its novelty, and the great interest of its subject, of a nature too calculated to seize upon the imagination, and to enlist the wishes of the pious and contemplative
${ }^{1}$ The idea of the Hebrew origin of the North American Indians, which was advocated so warmly by the early settlers in the new world, appears of late to be very generally disregarded, or to be looked on as an idle and visionary speculation, the mere offspring of the enthusiasm and imagination. That men who were excited by the interest of the subject, should fancy some analogies and points of resemblance, where others, who were indifferent, or perhaps incredulous, were unable to perceive, or unwilling to admit them, is too much in accordance with human nature to excite our surprise. But to say that the several facts and arguments which liave been adduced by so many different authors in support of this opinion, are nothing more than the effects of imagination, is a bare assertion against positive testimony, a mode of reasoning too unphilosophical to satisfy the mind of the most superficial inquirer. The idea of the Hebrew origin of the North American Indians, was entertained by almost all the first ministers who settled in New England, as early as the middle of the sixteenth century. It appears to have been first suggested to John Elliot, (the Indian Evangelist, as he is deservedly called,) by a Mr. Winslow, the agent in New England of the Massachusetts colony, about the year 1549; and was communicated as the opinion of a learned Jew, named Rabbi ben Israel. It was subsequently maintained by several other writers on the subject, and supported by arguments drawn from several striking peculiarities, which characterise the manners, customs, religion, usages, and physiognomy of the North American Indians. These writers are far too numerous to be quoted, but the report of Mr. Blome and Cottou Mather's "Magnalia Christi Americana," published in the seventeenth century, and the work of Adair in the eighteenth, though not altogether free from objections, will suffice to show the general opinion of the age in which these writers lived. In later times the subject has been treated by Dr. Bodinot," in his "Star in the West," in which he has applied to it the interpretation of the dream contained in 2 Esdras xiii. 39, et seq., which contains these remarkable words :-"And whereas thou sawest that he gathered auother peaceable multitude unto him; those are the ten tribes which were carried away prisoners out of their own land, in the the time of Osea, the king, whom Salmanasar, the king of Assyria, led away captive, and he carried them over the waters; and so came they into another land. But they took this counsel among themselves, that they would leave the multitude of the heathen, and go forth into a further country where never mankind dwelt. That they might there keep their statutes, which they never kept in their own land. And they entered unto Euphrates, by the narrow passages of the river. For the Most High then showed signs for them, and held still the flood till they were passed over. For through that country, there was a great way to go, namely of a year and a half; and the same region is called Arsareth," \&c. The last writer on the subject is Colton. And in these authors may be found perhaps all that can be said on the question.
in the establishment of its probability, to be dispassionately and fairly viewed; " we are, therefore, (to use the words of Jervis on this subject,) constantly led to suspect the fidelity of the statements of these early writers, because their judgments had lost their equipoise, and they saw everything through a discoloured medium." But it is equally to be regretted, that those who thought proper to reject these hypotheses, founded, as they appeared to be, on a number of positive facts and circumstances, did not think it necessary to give their reasons for so doing, or to enter into the exposition of the fallacy of those arguments, or the misstatement of those circumstances, upon which the opinion which they rejected appeared to be established. Instead of this, they seem to have been satisfied with a single argument; and on the grounds of an opinion that the language of the North Amcrican Indians was different and distinct from that of the Hebrews, they have abandoned the subject, as undeserving of further comment or consideration. As a general rule, it may be adnitted, "that the most unequivocal method of ascertaining the origin of a people, is to examine with attention the character of their language, and to compare it with the languages of more ancient nations." But the history of some of the wandering tribes of the East, shows that this rule is not always to be relied on; and that the Parsees of India, are not the only people, who, having wandered, or been driven from their native land, have abandoned, entirely, the language of their ancestors, and adopted that of the country where they settled. If, therefore, it is true, as is so generally stated, that the Indians of North America have preserved in their physiognomy so strong a resemblance to the Jewish features, that, to use the quaint expression of an early writer, " a man would think himself in Duke's Place, or Bury Street, in London, when he seeth them;" if there are in the rites and ceremonies of their religion, so many points of conformity with the Jewish ritual, as are generally admitted-if the sacred character with which they invest the ark, or covered chest, which they carry in their expeditions is not grossly exaggerated, or utterly misstatcd-if they apply the Hebrew term, A-loh-heem, or "Gods," to the "Great Spirit," the name by which they call the Deity, and if "in their sacred songs and dances, Hal-le-lu-yah is often heard as perfectly as in a Christian choir;" and, to cite but one other point of resemblance, if their deep veneration for the word Jehovah resembles so nearly as is stated the awe with which the Hebrews regard the mysterious name Jehovah; the mere difference of language is not, in my opinion, sufficient to discredit their Hebrew origin, in opposition to the
testimony of so many circumstances, which cannot be attributed to chance or to accident. ${ }^{1}$ From the traditions of the Jews who are scattered throughout China, we are informed that their ancestors were established in that country during the reign of the Han dynasty, which ascended the throne in the third century before the Christian era; and there is nothing therefore extravagant or improbable, in supposing that in times as remote or more ancient, another body of the same people were driven from their settlements by the causes which impelled those who fled into China, and that, taking a somewhat more northerly course, they persevered in their wanderings till they reached the narrow channel between Asia and America, (supposing such a channel to have existed in those times,) which, whether they were seeking a more genial climate, or were fleeing from the attacks of the wild tribes of Tartary, they would have been equally desirous of crossing. Necessity may have compelled them to join themselves in intercourse with the tribes who preceded them in the occupation of America, till the language of their fathers fell into disuse, and nothing remained to bear witness to their descent, save the marks which nature has stamped upon their features, and those rites and ceremonics of the religion of their ancestors, which their ignorant superstition may have led them to retain, in the absence of any more inviting form of worship, long after the religion of which they were the symbols had been lost and forgotten in the stream of time. Still, however, supposing it were proved that the American Indians were of Hebrew descent, it would be of little use in our present inquiry. No certain argument could be adduced for assigning their origin to the captives of Samaria, rather than to the Jews who were driven from Jerusalem. Much less, in the absence of all record and tradition, can it be asserted that any traces of the ten tribes of Israel can be found among the Indians of North America.

The last opinion which has been advanced on the subject, is that of the well-known Dr. Wolff. He says that "In the year 1829, being then at Jerusalem, I said to my wife, Bochara and Balkh are very much in my mind, for I think I shall there find the ten tribes." In pursuance of this idea, he set off on his travels. On his arrival at Meshed, he found there several Jews, of whom he says, "that they protest against the name of Jcw; they want to be called
${ }^{1}$ With regard to their language, Colton observes, that "the universal paramount requisition among them of the guttural organs in the use of their languages is a remarkable type of the Hebrew."

לבי בישר i. e., Bení Israel, children of Israel." On arriving at Bokhara, he entered into discussion with the Jews of that place, and says, "Rabbi Gaday informed me that the old Rabbis of Bochara assert that Balkh and Bochara were the Habor and Halah of 2 Kings xvii. 6, and that the Ammoo, called also the Gihoon or Oxus, is the river Gozan, mentioned in the same chapter; that the Jews at Subzawar had bcen carried by some king to Samarkand, Balkh, and Bochara." The Mussulman moollas confirmed this opinion, by saying that Balkh was originally called Hanah, and subsequently Halah. He proceeds to say, "Some of the Jews say that the ten tribes are beyond China, and one must cross the Sumbatyon in order to reach them; but the river is very stormy through the whole week, excepting on the Sabbath-day. On the Sabbath, Gentiles were allowed to cross it, but not the Jews, for the ten tribes would say, Why do you transgress the law, by crossing the river on the Sabbath day? and would stone them, according to the Mosaical law. Though this is mixed with fiction, there is no doubt that some of the tribes are in China, as I hope to prove when I come to the narrative of my journey to Cashmere. The tradition already mentioned of the emigration of the children of Israel to Isheen-Patsheen, shows that some of the ten tribes must have been there, though I believe likewise the Benee Israel round and at Bombay, to be of the ten tribcs. Rabbi Joseph ben Zachariah ben Mashah, from Sanaa in Yemen, now at Bochara, a very lcarned man, who speaks, as do all the Jews of Yemen, beautifully the Hebrew tongue, and also the Arabic language, tells me that the Benee Israel at Bancoot, near Bombay, are believed by the Jews of Yemen to be of the ten tribes." The opinion, then, of the missionary Wolff, appears to be (for it is not very clearly expressed), that the ten tribes are around Lassa, in Tibet and China. But the grounds on which this opinion is founded appear to be purely speculative, being nothing more tnan vague traditions not sufficient to set at rest, in a satisfactory manner, any part of the subject now under discussion. The followers of the law of Moses in Tibet and China may be Israclites, but there is nothing to show that they are not Jews.

Before quitting this part of the subject, I may notice the singular race of people above alluded to, who, though unquestionably of Hebrew descent, are distinguished from all others of the same family by certain peculiarities, so marked and singular, that they are well deserving of the attention of those who enjoy an opportunity of inquiring into their history. I allude to the people who are gene-
rally known as the Black Jews of Malabar. ${ }^{1}$ By their own accounts, as far as I can learn, they arrived in India not long after the destruction of Jerusalem by the Roman armies under Titus; they say that the ships in which they had embarked were wrecked on the western coast of India; that a few of the men only escaped, who married women from the part of the country on which they were thrown, from whose offspring the present people are descended. It is, however, to be observed, that they call themselves Bení Israel, or children of Israel, and not Jews, the general name by which the followers of the law of Moses are, I believe, universally called. They declare, however, that they are Jews or Yahudi, ${ }^{2}$ though for this I can find no other authority than their own assertion, founded on their wish to appear of the same caste or family with the Jews of Arabia, Syria, \&c., by whom they are regarded with the utmost contempt. Moreover they differ in stature and physiognomy from the Jews of the other parts of Asia, from which and from other cer-* tain peculiarities, Dr. Buchanan found reason to believe "that they arrived in India many ages before the white Jews, who regard them as being of an inferior caste." The subject is one on which little is known, and is well deserving of investigation.

It is needless to dilate any further on this subject. The opinions above noticed are all which I am aware of, that have attained such a degree of authority and support, as to render any mention of them necessary or interesting. And when it is considcred how slight are the foundations on which they are based, when the facts of the case, as above set forth, have been carefully attended to and fairly weighed, it must be admitted that the children of Israel have not been preserved as a separate body, and that it is vain and hopeless to seek for their descendants either in the present day, or anywhere within the reach of historical record. It is probable that many of them adhered religiously to the faith of their fathers, till the capture

[^73]of Jerusalem and the fall of Judah; and that then, when the Jews were scattered throughout Persia, and were, by the toleration of the Persian princes, allowed to form themselves into separate communities, or to return if they preferred it to their native land, we may suppose that the hopeless exile of Israel would endeavour to avail himself of the indulgence thus granted to his brethren of Judah; and as national animosity would be buried for the time beneath the weight of general calamity, they would gradually be incorporated in the tribe of Judah, and fall under the general denomination of Jcws. Others, it is probable, returned in the course of time to Samaria, and joined themselves with the strangers whom the kings of Assyria had placed in the cities which were once their own. And it is likely that a great portion lapsed into idolatry, and became a part of the nation of their conquerors. "When the law was given in thunder from Mount Sinai, when the tides of the ocean and the coursc of the planets were suspended for the convenience of the Israelites; and when temporal rewards and punishments were the immediate consequence of their piety or disobedience, they perpetually lapsed into rebellion against the visible majesty of their divine King, placed the idols of the nations in the sanctuary of Jehovah, and imitated every fantastic ceremony that was practised in the tents of the Arabs, or the cities of Phœenicia." How then can we suppose that, when dispirited and without hope, captives in the hands of strangers and idolaters, they should refrain in their despair from the worship of those idols, to whose agency they attributed that power and success which the God whom they had insulted and forgotten in their prosperity had transferred to the enemies of their country and their religion ?1 They were surrounded by countries closely allied to them by a common origin and a cognate dialect, from whom their religion and religious institutions alone kept them separate and distinct. The strictness and severity of the law of Moses, was not likely to be an object of preference with a people, in the bitter hours of servitude and exile, after they had so constantly slighted and rejected it, when they knew it was upheld by the hand of the Most High, and enforced by immediate and fearful punishment. They had not that cheering

1 "And it shall come to pass, that as the Lord rejoieed over you to do you good, and to multiply you, so the Lord will rejoice over you to destroy you, and to bring you to nought. And ye shall be plucked from off the land whither thou goest to possess it. And the Lord shall seatter thee among all people, from the one end of the earth even to the other. And there thou shalt scrve other gods, which neither thou nor thy fathers have known, even wood and stone."-Deuteronomy xxviii. 63, 64.
consolation afforded them, those manifestations of the divine power cxercised in their behalf, which buoycd up the spirits of the captives of Judah during the period of their captivity. Prone to idolatry, and surrounded by temptation, a miracle alone could have upheld their belief, and that miracle was not vouchsafed them. They were left to the natural course of events, unchecked by further punishments, unsupported by a hope ; and their past history is enough to show how rapid and how general would be their fall into the superstitions and the idolatry of Assyria.

Bombay, April, 1836.

# Art. XVII.-Analysis and Specimens of a Persian Work on Mathematics and Astronomy, by the late John Tytler, Esq. 

Read June 4th, 1836.
A short time beforc my leaving Calcutta, a Maulavi, by name Gholaum Hosain, was introduced to me under the character of a great mathematician and astronomer. I found he was in the service of Mirza Khán Bahádur, the Mohammedan son of Mitrajít Singh, the well-known Mahá Rájá, of Takari, in Bahar. The Maulavi stated, that he had devoted himself to the study of mathematics and astronomy, not only as far as they are contained in the Arabian and Brahminical writings, but also as far as he could gain from the interpretation of European books, as given him by European friends, he himself being ignorant of English; that he had, under the patronage of Khán Bahádur, compiled a system of these sciences from all these sources, and that his patron had supplied him with a sum of money to publish this book at one of the lithographic presses of Calcutta. This was the purport of his present errand down the country, and he had already got about 100 pages carried through the press. His object in applying to me was to obtain a recommendation of his work to the Government Education Committee. He produced his MS., but it was much too long to examine minutely in the short time I had to remain in Calcutta, and in my then harassed state of mind and body. I saw enough, however, to convince mc that it was a work of very considerable merit and information, compared with the author's opportunities. It commenced with the elements of geometry and arithmetic as known to the Hindús, and thence went on. In the course of the work are explained, the European methods of decimal fractions, logarithms, and trigonometrical tables. The author then gives a system of astronomy, first according to the Brahmins, then according to Ptolemy, and then according to Copernicus, together with an account of astronomical instruments, and the mode of calculating astronomical tables and almanacs. The whole MS., as will appear from the author's own computation, comprehends 900 closely-written quarto pages. To be able to recommend the work with greater confidence to the Government Committee, I requested the author to furnish me with a few short extracts, and as my hasty departure from Calcutta precluded my taking any steps in the matter there, I translated the extracts during
my passage to the Cape of Good Hopc, and transmitted them from thence to the Committee in Calcutta, with a letter explanatory of the nature of the work and the views of the author. I have not as yet heard anything of the result. As the extracts were sent me in duplicate, I trust it may not be unsatisfactory to the Society to receive the other copy, together with a translation. They are as follows:

No. I. is a letter from the author to me explanatory of his views.

## No. I.

" To the gentleman of lofty virtues, of sublime dignity, the bestower of bounty, the goal of hope to the miserable, perpetua sit beneficentia ejus.
" After preferring what is required of reverential salutation and honour, let it be proved to your sun-like heart, that the elements of mathematics, especially geometry and arithmetic, are full of real amusement, and that in them there is no uncertainty as in other sciences, besides which, manifold and multiplied advantages are prepared for their students. Hence, this humble one, contrary (to the practice of) his equals, has spent much time in acquiring this science, and has derived great benefit from the study under masters of the works of the ancients, which exist in the Arabic and Persian languages, and he has acquired (the knowledge of) many valuable particulars which are not to be found in the writings of the Greeks, by the opportunity of associating with (European) gentlemen of lofty dignity. After these acquisitions it was continually in my humble heart that I should compose a comprehensive book, which should be extracted from the aforesaid books, with many additional observations in the Persian language, that the generality of the inhabitants of India, who pay little attention to this science, should be benefited; but, on account of the continual occurrence of worldly affairs, which is unavoidable to every individual of the human race, my leisure did not allow me to turn myself to this quarter; at last, by a favourable accident, a short time ago, Rájá Khán Bahádur Khán Diláwar Jang, who is an admirer of profound sciences, became my surety and confederate in the times of composition; on this account your humble servant, with his whole heart, composed a book comprising the general principles of mathematics in such a manner that it might render the books of the ancients unnecessary to students, and, in short, the nature of its composition will be manifest to your noble understanding from the list of contents
enclosed in this petition ; and that the existence of this book may continue for some time, I have caused the printing of it to be commenced at the lithographic press, and I am myself employed in correcting it, so that the book itself should be suited to practical purposes; but the desire of (me a) seeker of fortune, is this, that, since your worship is the touchstone of the standard of science, you should take the book under your noble inspection, in such a manner, that, by the determination of your happy judgment, this book should be useful to the public, you should in the way of benevolence be pleased so to bestow your endeavours, that the gentlemen of lofty dignity of the Committee, perpetua sit prosperitas corum, (the universal benevolence of which most liberal personages is always employed in the business of diffusing knowledge, and the intelligence of the wise, and the universal tranquillization of the creation,) should direct particular attention to be paid to the printing of this book, as this will not be far off from the eneouragement of talent. Further, may the days of cheerfulness and pleasure be perpetual, accompanied by a state of affluence.
" The supplicatory petition of the sinner Gholaum Hosain, of Juanpore. Written on the 12th November, 1834."

No. II. is a list of the contents of the work, divided into its several books and chapters.

## No. II.

"Contents of the book cntitled, the Bahádur Khánian Collection, which comprises the sciences of the elements of mathematics, and consists of about 900 pages of one pattern, divided into six treasuries, ut enumeratum est.
" Treasury the first. Of the science of Arithmetic, comprising 274 propositions arranged into six castles.
" 1 . An account of the definitions, object, and principles of geometry.
" 2. The principles of straight lines, angles, and rectilinear surfaces, comprised in 49 propositions.
" 3. The principles of circles and ares, the properties of lines and angles, which arc produced by the comparison of circles, 35 propositions.
" 4. The principles of gencral quantities, and the rules of simple and compound and derivative proportion, 68 propositions.
" 5 . The principles of soiids, cylinders, pyramids, cones, and spheres, 61 propositions.
" 6 . The principles of circles and arcs, and angles, which exist in the surface of a sphere and of ovals, 61 propositions.
" Treasury the second. Of Optics, which consists of 59 propositions, arranged in three castles.
" 1 . Of the principles of vision.
" 2 . Of the science of optics, comprising 45 propositions.
" 3 . Of the science of reflection, comprising 14 propositions.
" Treasury third. Of Arithmetic, comprising an introduction, and eight treasuries.
" Introduction. Of the definition of arithmetic, and an explanation of its object.
" 1 . Of the operations of the arithmetic of integers.
" 2 . Of the operations of the arithmetic of fractions.
" 3 . Of the operations of the arithmetic of decimal fractions, and the rules of logarithms, and a table of them.
" 4 . Of the operations of arithmetic by sexagesimal figures.
" 5 . Of the higher rules.
" 6 . Of discovering unknown quantities by means of the rule of false.
" 7. Of the operations of algebra for the practice and exercise of students.
" 8 . Of miscellaneous questions for the practice and exercise of students.
" Treasury the fourth. Of extracts from the sciences of the three preceding treasuries; that is, of mensuration, of finding the magnitudes of sincs and tangents, the division of circles, and their parts, comprising one introduction and seven chapters.
" 1 . Of finding the magnitude of chords and sines, and of their tables.
" 2 . Of finding the magnitudes of tangents, and of their tables.
" 3 . Of the division of circles.
" 4. Of knowing the magnitudes of the sides and angles of triangles.
" 5 . Of knowing the quantities of the sides and angles of spherical triangles which exist on the surface of a sphere.
" 6 . Of the scquelæ to the measurement of the surface of the earth, and the knowledge of the height of elevations, and the breadth of rivers, and the depth of wells.
" Treasury fifth. Of the science of Astronomy, comprising onc key, five castles, and a conclusion.
" Key of the definition, and object, and origin of the science of astronomy.
" 1 . A general account of the sciences of the spheres, and the inferior elements, and the nature of the stratification of these bodies, and the inferences.
" 2. An account of instruments for observing, the method of observation, and a knowledge of spherical quantities.
" 3 . Of the particular form of the spheres, and an account of the nature and quantities of their motion, according to the rules of observation, and the finding of mean and equable (motion).
" 4 . Of the form of the earth and the particularities of its elevation, and of things connected therewith.
" 5 . Of the knowledge of distances and magnitudes.
"Conclusion. An cxplanation of the differences which exist among the observations of astronomers.
" Treasury the sixth. The explanation of the construction of astronomical tables and almanacs, comprised in two castles.
" 1. An explanation of the foundation and elements of astronomical tables.
" 2. An explanation of the technical terms of an almanac."

The next is the method of determining the proportion between the diameter of the circle and its circumference. I requested the author more particularly to give me these as a proof of how far he had proceeded in advance of his countrymen. All the other Mohammedan mathematicians, whom I had ever seen, contented themselves with the coarse approximation of 7 to 22 , but it will here be seen that the author carries it on to seven places of decimals. To understand his calculation it is necessary to premise, that the Mohammedans, in writing trigonometrical, astronomical, and all other calculations, in which we use decimal fractions, employ the sexagesimal system of the Greeks, that is, the system in which degrees are reckoned as integers; minutes, as figures immediately on the right hand of the decimal point; seconds, as the second figure on the right hand ; thirds, as the third, \&.c.; and these they express by the well-known (ب) Abjud letters. This system, however different in appearance, is founded on the same principles as our decimal notation, with two great advantages: First, that its base being 60 instead of ten, all numerical expressions are abbreviated; and, secondly, that 60 having so many more divisors than ten, the number of infi-
nite decimals is diminished. Its only fault is the want of a simple set of characters up to 59 ; were they invented, the sexagesimal system would be greatly preferable to the decimal.

I take as an example the first number occurring in the extract, the chord of A B, which, in the Arabic characters is اب that is, $1^{\prime}, 2^{\prime \prime}, 49^{\prime \prime \prime}, 54^{\mathrm{iv}}, 30^{\mathrm{v}}$, or, to use the letters corresponding to the abjud among the Greek astronomers, it is, a. $\beta . \mu \theta . v \delta . \lambda$ fifths, that is, $\frac{1}{60}+\frac{2}{60^{2}}+\frac{49}{60^{3}}+\frac{54}{60^{4}}+\frac{30}{60^{5}}$, all which, added together, will be found nearly equal to our decimal, .01694575 , \&c.; that is, $\frac{0}{10}+\frac{1}{10^{2}}+\frac{6}{10^{3}}+\frac{9}{10^{4}}+\frac{4}{10^{5}}+\frac{5}{10^{6}}+\frac{7}{10^{7}}+\frac{5}{10^{8}} \& c$.

It is also to be observed, that the Arabs reckon the radius of the circle to be equal to the base of the sexagesimal system, that is, to 60 ; hence, in comparing their tables with ours, their numbers must always be divided by 60 . Now, dividing the above number, there will be found $\frac{.01694575}{60}=.000282429$, \&c. for the chord or line of one minute, the chord and sine of very small ares being identical ; and, in our tables, the sine of $1^{\prime}$, is .0002909 , agreeing with the above very nearly.

Again, the last number in the extract from the author's tables, is the tangent of $2^{\circ} 59^{\prime}$, which is said to be or in Greek letters $\gamma . \zeta$. $\lambda \zeta$. $\delta$. $\lambda \zeta$. fourths, that is, $3^{\circ} 7^{\prime} 37^{\prime \prime} 4^{\prime \prime \prime} 37^{\mathrm{iv}}$ $=3+\frac{7}{60^{1}}+\frac{37}{60^{2}}+\frac{4}{60^{3}}+\frac{37}{60^{4}}=3.1269658177$, \&c., and this divided by $60=.05211609696$ for the natural tangent of $2^{\circ} 59^{\prime}$ decimally. In our tables it is .0521161 , which is very near.

According to this system integers are called degrees, درجادت durjat. Numbers in the second place, which correspond to our
 or elevation). Numbers in the third place, our hundreds, are musáni, مثاني (duplication). In the fourth place, or thousands, are, musális, $\dot{\dot{H}} \mathrm{~J}$ o (Triplication), \&c. So that, one elevation $=60$; one duplication $=60^{2}=3600$; one triplication $=60^{3}=$ 216000, \&c.

In the same manner we might call 10 an elevation; 100 , or $10^{2}$, a duplication; $10^{3}$, or 1000 , a triplication, \&c.
*In the Abjud letters ${ }^{\text {- }}$ (Jim) is written thus $(\underset{)}{ }$ ) also $\perp$ (Dal) is written like Hamza $(s)$ and $j(z e)$ has its diacritical point omitted.

Hence, the number given in tris extract,
 $\nu \theta, v \theta, v \theta \cdot v \theta, \mu \gamma, \lambda \gamma, \beta, \kappa \zeta . \mu \zeta . \kappa \beta, \kappa ร . \iota \in$
which I have decimalized thus:-
荧 宽
$595959^{\prime} 59^{\prime \prime} 43^{\prime \prime \prime} 33^{\text {ir }} 2^{8} 2$ in $^{\text {ri }} 47^{\text {vii }} 22^{\text {riii }} 26^{\text {ix }} 155^{\text {x }}$, is, in reality $59 \times$ $60+59+\frac{59}{60}+\frac{59}{60^{2}}+\frac{43}{60^{3}}+\frac{33}{690^{12}}+\frac{2}{60^{5}}+\frac{27}{60^{8}}+\frac{47}{690^{7}}+\frac{22}{69^{8}}+\frac{26}{60^{9}}+\frac{15}{60^{10}}$ and so of others.

In the same manner the distance betwcen the two foci of the earth's orbit is stated to be $\beta .{ }^{*}$. $\lambda \zeta$. к $\delta$ thirds, or $2^{\circ} 00^{\prime} 37^{\prime \prime} 24^{\prime \prime \prime}$, the half of which, or $1^{\circ} 0^{\prime} 18^{\prime \prime} 42^{\prime \prime \prime}$, that is, $1+\frac{0}{60}+\frac{18}{60^{2}}+\frac{42}{60^{3}}$ is the excentricity, the semi-major axis being 60 .

$$
\text { That is, } \begin{aligned}
& 1=1.000000000 \\
& \frac{0}{60}=0.000000000 \\
& \frac{18}{60 z}=0.000513888 \\
& \frac{42}{60^{3}}=\frac{0.000055555}{60)} \\
& \frac{1.000569444}{0.016676157}
\end{aligned}
$$

In Vince's astronomy, Vol. I., p. 141, it is stated to be from .01681395 to .016919 , which agrecs nearly.

## III.

Extract from the book called the Jámia Bahádur Khani, (the Bahádur Khánian collection,) as a specimen.
" Castle third, of the division of the circle: and the meaning of that is, to know the arithmetical proportion of the diameter to its circumference, which is the nearest to the real proportion of the quantities, and for this we must suppose an arc A B, a very small part of the circumference; for cxample, onc minute, and in this case the magnitude of the chord A B, is $a . \beta . \mu \theta$. v $\delta$. $\lambda$ fifths, ( $1^{\prime}$ $2^{\prime \prime} 49^{\prime \prime \prime} 54^{\mathrm{iv}} 30^{\mathrm{v}}$,) and the centre of the circle is the point D ; join $\mathrm{D} \mathrm{A}, \mathrm{D} \mathrm{B}$ two radii, and draw from the centre D a perpendicutar DE to A B, and by proposition $\gamma(3)$ of 3 , trcasury first; this perpendicular will bisect the said chord in the point E. Produce
this perpendicular on the side of $E$ to the point $G$, which is in the circumference, and draw from the point $G$ the perpendicular $H G T$ on D G till it meets D A, D B, produced in the points H, T. Then, I say, that when the known square of A E , which is, ᄂร. кร. v乡. $\lambda \beta$. $\iota \beta$. $\lambda \zeta$. $\lambda \gamma$. $\mu \epsilon$. tenths ( $16^{\prime \prime \prime} 26^{\text {iv }} 57^{\mathrm{v}} 32^{\text {vi }} 12^{\text {vii }} 37^{\text {viii }} 33^{\text {ix }} 45^{\mathrm{x}}$ ) is subtracted from the square of DA the semidiameter, there remains
曾
$\nu \theta . \nu \theta, \nu \theta . \nu \theta . \mu \gamma . \lambda \gamma . \beta . \kappa \zeta . \mu \zeta . \kappa \beta$. кॅ. $\iota$. tenths, ( $59.59^{\circ} 59^{\prime}$ $59^{\prime \prime} 43^{\prime \prime \prime} 33^{\text {iv }} 2^{v} 27^{\text {vi }} 47^{\text {vii }} 22^{\text {viii }} 26^{\text {ix }} 15^{\mathrm{x}}$ ) which begins from elevation and ends with tenths, and this is the square of DE.

Fig. 1.

"Its root which is $v \theta . v \theta . v \theta . v \theta . v a . \mu \varsigma$. fifths, ( $59^{\circ} 59^{\prime} 59^{\prime \prime} 59^{\prime \prime \prime}$ $51^{\text {iv }} 46^{v}$ ) is the length of DE ; and by the similarity of the two triangles D E A, D G H, the proportion of the known side D E to the side D G the semidiameter, is as the proportion of the known side A E to the unknown side G H; hence if we divide AE by DE properly reduced, there will come out $\mathrm{G} H$, and that is $\lambda a . \kappa \delta . \nu \zeta$. $\iota \epsilon . \delta$ fifths ( $31^{\prime} 24^{\prime \prime} 57^{\prime \prime \prime} 15^{\text {iv }} 4^{\mathrm{v}}$ ) and the double of this which is $\alpha . \beta$. $\mu \theta$. $v \delta$. $\lambda . \eta$ fifths ( $1^{\circ} 2^{\prime} 49^{\prime \prime} 54^{\prime \prime \prime} 30^{\text {iv }} 8^{\vee}$ ) is the length of H T ; and since A B is the chord of one minute there is no doubt that it is the side of an equilateral and equiangular figure described in the circle, the number of whose sides is $\kappa a, \alpha \cdot \chi(21 \times 1000+600)$ that is twenty-one thousand six hundred, (the number of minutes in the whole circumferencc) which in reality is six duplications ( $6 \times 60^{2}$ ); so if we multiply A B by six duplications it will be the length of all the said sides тоя. $\nu \theta$. $\kappa \zeta$ seconds; that is, three hundred and seventy-six degrees, fifty-nine minutes, and twenty-seven seconds, in parts of the diametcr which is $\rho \kappa$ ( 120 ) degrees; and by proposition $v(50)$ of 4 , treasury first, the circumference of the circle is greater than this quantity. Again, H T is the side of the same figure which is described about the circle, and if we multiply H T into the same six duplications, the length of all the sides of the
 that is, three hundred and seventy-six degrees, fifty-nine minutes, twenty-seven scconds, no thirds, and forty-eight fourths; and by proposition $v a$. ( 51 ), the circumference of the circle is smaller than this; hence the circumference of the circle is as it were the mean number of these two, so that if we take half the difference which is $\kappa \delta$ fourths, $\left(24^{\text {iv, }}\right.$, that is $\left.\frac{24}{60^{*}}\right)$, and either add it to the said smaller number, or extract it from the greater; in both cases the amount of the circumference of the circle is found $\tau 0 \varsigma . v \theta . \kappa \zeta .{ }^{*}, \kappa \delta$ fourths, and if we reduce the degrees to elcvations, the form of the expression will be this $\varsigma . \iota \varsigma . v \theta . \kappa \zeta .{ }^{*}$. к $\delta$, that is, six elevations, sixteen degrees, fifty-nine minutes, twenty-seven seconds, no third, and twenty-four fourths; after that I divide the quantity of the circumference by the diameter, which is two elevations, there comes out $\gamma . \eta . \kappa \theta$. $\mu \gamma$. $\lambda$. $\iota$. fifths, ( $3^{\circ} 8^{\prime} 29^{\prime \prime} 43^{\prime \prime \prime} 30^{\mathrm{iv}} 12^{\mathrm{v}}$.)
"Hence the proportion of the diameter to the circumference is the same as the proportion of unity to this number; that is, to three integers, and the remaining sexagesimal fractions, and if we reduce each antecedent and consequent to a common consequent of fifths, we shall obtain the proportion of the diameter to the circumference in decimal figures, as 777600000 to 2442900612 . And as the common measure of these two numbers is twelve, so, for abbreviation, we divide each antecedent and consequent by twelve. Then the twelfth part of the antecedent is 64800000 , and the twelfth part of the consequent is 203575051 , and then by a minute consideration, these two numbers are the least integral numbers, whose proportion is as the proportion of the diameter and the circumference. And again, when we divide the first number by the second, by the calculation of decimal fractions, it produces the number 3.1415903 ; that is, three integers and fourteen lacks, and fifteen thousand and nine hundred and three parts of one crore; hence the circumference of every circle whose diameter is supposed to be unity is three times and the amount of this fraction.
"Admonition. That which is common among surveyors is, that the proportion of the diameter to the circumference is as the proportion of 7 to 22. This proportion is less than the accurate proportion which has been stated, for if we reduce the proportion of 7 to 22 to decimal fractions, it is as the proportion of unity to this number 3.1428571 , and this is greater than the first by this fraction, .00012668 ; but as this excess is approximately one part out of a
thousand parts, so in the mcasurement of small circles the difference is not perceptible, and hence this is the proportion generally employed.
"Inference. As the circumference of the circle in parts of the diameter is $\tau 0 \approx, \nu \theta . \kappa \zeta .{ }^{*}$. $\kappa \delta$ fourths-if this be divided by 360 , which is the number of the circumferential degrees, the quotient which is $a . \beta . \mu \theta . \nu \delta . \lambda . \delta$ fifths is the quantity of one circumferential degree in parts of the diameter, and if we divide one circumferential degree by this number, the quotient which is ${ }^{*} . \nu \zeta . \nu \zeta . \mu \delta$. $\nu \zeta . \mu$ fifths ( $0^{\circ} .57^{\prime} 57^{\prime \prime} 44^{\prime \prime \prime} 57^{\text {iv }} 40^{\circ}$ ) is the quantity of one diametrical degree in parts of the circumference."

The next extract will be read with some interest. It is an explanation of Seth Ward's famous problem for determining the place of a planet by supposing its motion round the focus in which the central body is not, as equable. The method in which this is treated is remarkable. The author begins by attributing the discovery of the ellipticity of the planetary orbits to one of his own countrymen. This is not perhaps very wonderful, considering his situation and birth-place. He then goes on to endeavour to reconcile this to the Ptolemaic idea of circular orbits, and this he does by a very fanciful hypothesis of a circle and epicycle: then taking it for granted that the motion of the planet round the empty focus is uniform, he shows the method of finding the planet's true place, and concludes with some observations. The question that naturally occurs on this occasion is, how the knowledge of this problem could have travelled to the court of the Great Mogul. Calculating from the probable ages of the authorities which the author quotes, it must have been known in the East for a hundred years. It was published in Europe (see Vince's Astronomy, Vol. I., chap x.) in 1654, and perhaps may have reached Delhi about the middle of the last century. It would be desirable to investigate the channel through which it did so, as a matter of rational curiosity, and also as affording useful hints as to the best method of diffusing European science among the Oriental nations.

## IV.

From the book entitled the Bahádur Khánian collection.
"The majority of ancient and most of modern observers have determined the orbit to be an excentric circle, and have calculated the
partial equation on this supposition ; and Mirza Khair Allah, the arithmetician, in his commentary on the tables of Mohammed Shah, has asserted that he has found, not only that the orbit of the sun is excentric, but that the orbits of all the signs are of an elliptical form; by this proof, that if we reckon the place of the sun and planets, according to the equation of a circle, we shall not find them agreeable to obscrvation ; contrary to what takes place in the equation which is produced in the case of the ellipse, and if we determine the place from that latter calculation, the determination will be more agreeable to observation. Hence the rule of conversion proves that the orbits are elliptical, and for astronomical purposes the following explanation is given; that this supposition is realized by supposing the existence of three spheres, one agreeable, the other excentric, so

Fig. 2.

that the distance between the two centres should be equal to half the distance between the known centres, and on the circumferencc of the excentric sphere, an epicycle whose semidiameter is equal to half the difference of the two diameters, the longer and shorter of the ellipse, that is in the figure of the solid sphere, the semidiameter of the epicycle is equal to the sum of this difference, and the semidiameter of the sun, and the superior movement of the epicycle, is to be in the same direction as that of the excentric sphere, and of double the angular velocity, and in the beginning of things the centre of the epicycle must have been at the greatest distance of the excentric sphere, and the centre of the sun at the greatest distance of the epicycle. In this case, by the motion of the epicycle and the excen.
tric sphere, the centre of the sun will describe an orbit, similar to an elliptic orbit; and the centre of the universe will be one of the two focal points of the ellipse, and the centre of the excentric sphere will fall in the place of the centre of the ellipse, and the other focal point, towards the other side of the excentric sphere, in the direction of the apogee, at the same distance as is between the centre of the universe and the centre of the excentric sphere; and the distance between the two focal points is called the sine of the extreme equation, and the second focal point is supposed to be the known place of the excentricity ; so that the epicycle should be carried out of the middle; and all that has been said will be evident from this figure. The compiler says, that this demonstration will not prove the orbit to be exactly elliptical, but only that, from the small space between the two focal points, it is very similar to an ellipse, and the equation which is produced on the supposition of an ellipse, is not perceptibly different. At present it is incumbent on us to explain the mode of demonstrating the method of finding the equation in an elliptical orbit; and we say, let A B C D be an elliptical orbit, A C is its

Fig. 3.

long, and $\mathrm{B} E \mathrm{D}$ its short axis, intersecting at right angles; H the centre of the universe, which is one of the two focal points; $\mathbf{G}$, the place of the excentricity, which is the second focal point; $\mathbf{A}$ is the sun's point of apogee ; $C$ the point of perigee, and we suppose $T$, in the circumference of the ellipse, to be the centre of the sun, and we join GT, HT, and then the angle AGT, which is the measure of the motion of the sun's centre from the point A , is known, and so the angle T G H, which is the complement of the angle A GT to
the half circumference, is also known, and the two sides GT, H T, though they be not known separately, yet their sum which is equal to A C, the long axis of the ellipse, that is $\rho \kappa$ (120) degrees is known, and we produce GT towards I, till G I be equal to the long axis ; in this case T I is necessarily equal to T H, then we join I H, so that the isosceles triangle I T I be produced; and we show that in the triangle H G I two sides, H G, G I, and the angle H GI are known, hence the remaining sides and angles will be known, that is, the side I H, and the two angles G HI, G I H are known, and since the two angles T HI, TIH, on account of the equality of TI, TH are equal to the exterior angle GTH of the triangle H GT, which is, the angle of the equation is known to be double of the angle T I H, and that is what was required.

The construction is, that from the point H to I G, the perpendicular HK is to be drawn, and since in the right-angled triangle H K G the side G H is known, that is, it is $\beta$. *. $\lambda \zeta$. к $\delta$. thirds $\left(2^{\circ} 0^{\prime} 37^{\prime \prime} 24^{\prime \prime \prime}\right)$, and the angle A G T for example, is $\xi(60)$ degrees, so the angle K GH which is opposite is also $\xi(60)$ degrees, and the angle at $\mathbf{K}$ is right, hence the angle $\mathbf{G H} \mathbf{K}$ is $\lambda$ (30) degrees ; hence if G H be reduced and multiplied into the sine of H G K, which is $\nu a . \nu \zeta$. $\mu a$ seconds ( $51^{\circ} 5 f^{\prime} 41^{\prime \prime}$ ) the product which is $a . \mu \delta$. $\kappa \zeta . \kappa \epsilon$ thirds ( $1^{\circ} 44^{\prime} 27^{\prime \prime} 25^{\prime \prime \prime}$ ) will be the amount of H K , and this, if it be reduced and multiplied into the sine of the angle GHK, which is $\lambda$. * * * degrees $\left(30^{\circ}\right)$, the product which is $a .{ }^{*}$. $\downarrow . \mu \beta$ thirds $\left(1^{\circ} U^{\prime} 18^{\prime \prime} 42^{\prime \prime \prime}\right)$ is the length of the side G K. Now in the right
 $\left.0^{\prime} 18^{\prime \prime} 42^{\prime \prime \prime}\right)$, and the square of that is $\delta \cdot \delta^{\cdot} \beta^{\prime} 1 \varsigma^{\cdot} \lambda \eta^{\cdot} 5^{\cdot} a$ fourths (4. 4. $2^{\circ} 16^{\prime} 38^{\prime \prime} 6^{\prime \prime \prime} 1^{\mathrm{iv}}$ ) and the square of H K is $\gamma$. a. ıa. $\iota \epsilon . \iota \beta$ fourths ( $3^{\circ} 1^{\prime} 11^{\prime \prime} 15^{\prime \prime \prime} 12^{\text {iv }}$ ), and the sum of the two squares is
$\delta . \delta . є$. ८५. $\mu \theta$. $\imath \eta$. ıy fourths (4. $4.5^{\circ} 17^{\prime} 49^{\prime \prime} 18^{\prime \prime \prime} 13^{\text {iv }}$ ). The root of that which is $\rho \kappa a . a . a . \gamma$ thirds ( $121^{\circ} 1^{\prime} 1^{\prime \prime} 3^{\prime \prime \prime}$ ) is the length of the side I H. After this I reduce and divide H K by H I, there
音
comes out *.va. $\mu \zeta . \kappa \beta$ seconds ( $0.51^{\circ} 47^{\prime} 22^{\prime \prime}$ ), the sine of the angle $I$, and the are of this (as found) in the table of sines, is the magnitude of the angle of the equation GT H, $a . \lambda \eta . \nu \delta$ seconds $\left(1^{\circ} 38^{\prime} 54^{\prime \prime}\right)$. And observe that the extreme excess of the annual equations of the point of the greatcst and least distance, is *. a. $v \eta$ seconds ( $0^{\circ} .1^{\prime} 58$.) If this difference be added to the mean daily (motion) of the sun, the sum, which is $a$. a.s. $\kappa$ thirds ( $1^{\circ} 1^{\prime} 6^{\prime \prime} 20^{\prime \prime \prime}$ )
is the greatest daily velocity of the sun, and if it be subtracted from the mean daily motion, the remainder, which is ${ }^{*} . \nu \zeta . \iota . \kappa$ thirds $\left(0^{\circ} 57^{\prime} 10^{\prime \prime} 20^{\prime \prime \prime}\right)$ is the least daily velocity. Observation.-European philosophers consider the earth as moving in an elliptical orbit, and the sun as fixed in the longer diameter of the ellipse, so that the centre of the sun coincides with one of the two focal points, and the centre of the ecliptic is the centre of the sun. For example, A B C D

Fig. 4.

is the elliptic orbit of the motion of the earth, and A C is the longer diameter, and the two focal points on the longer axis are $\mathbf{E}$ and $\mathbf{G}$, and H T is the sun's disk, and IKL M is the ecliptic. Then after determining these lines, I say that if the earth passes over the point C, it is at its least distance from the sun; and with respect to the ecliptic, it is in the point $L$, and it is supposed that the place of the sun is in the point $I$, which is its higher apsis, and is opposite to the point $L$, and thus the position of the earth in every point being known, the position of the sun is to be considered as opposite to that; and if the earth proceeds from the point $C$ towards $D$, it is supposed that the sun proceeds from I towards $K$, and the distance of the earth from the sun increases daily, till it comes to the point A , and then the earth will have come to its greatest distance from the sun, and the sun is seen in the point $L$, and this point $L$ is imagined to be the higher apsis of the sun, and the distance of its passage from the point A is the decremental distance, and when it reaches $\mathbf{C}$, then it appears in its original state; and as B C D is less than half of the elliptic orbit, and the part corresponding to it in the ecliptic is a semicircle, so an inhabitant of the earth passes over this
half quickly, and hence he supposes that the sun passes through the half MI K quickly, and for the same reason the earth passes over the half K I M slowly. And as it is certain that from the earth the situation of the sun appears opposite to that of the earth, so if (the spectator) be supposed looking at the centre of the sun, the place of the earth will appear opposite to the sun, that is in that half in which the motion of the sun appears slow, the earth will appcar to go quick, and in the quick half, slow; hence if the equation which has been found by the demonstration with reference to the focal point be brought into operation reversedly, on the supposition of the earth's motion, and the place of the earth be determined, what is required will be found. And it is sufficient for us, if after determining the sun's place we should add or subtract half a revolution to or from it, so that according to the phraseology of Europeans, we may obtain the earth's place.

The next extract does not properly belong to the book in question. Its history is this-On Gholaum Hosain's arrival in Calcutta, he paid a visit to the Madrasah, or Mohammcdan College there, and had a conference with the students on the subjects of their studies. The result was, that as a trial of skill he proposed a number of problems for them to resolve, and they in return proposed one to him. Of all these he gave me a copy. Those proposed by him to the students are as follows :
I. Produce a finite straight line, so that its square shall be equal to the rectangle between the whole line so produced, and the part produced.
II. Within a circle describe another circle touching the first, and cutting out of it a given part.
III. Describe a circle equal to a given number of other circles.
IV. Determine the length of the perpendicular from the apex of a given scalene triangle to the base.
V. Prove that the area of an equilateral triangle is equal to the square root of thrice the square of the fourth part of the square of the side.
VI. If a line be drawn from one extremity of the diameter of a circle, to a tangent raised from the other extremity, the rectangle contained by the whole line thus drawn, and the part of it within the circle, is cqual to the square of the diameter.
VII. Is the proposition whose translation is given in this extract.
VIII. From the cube of a given number to find the cube of the next number above and below it in the natural series.
IX. Having given the value of $x^{2} z$ and $x z^{2}$ to find $x$ and $z$.

The question which the students proposed to him was this. Let the base of the right-angled triangle be 60 . From the extremity of its perpendicular, let a line be drawn to the base, dividing it into segments of 45 and 15 , and forming with the hypothenuse an angle of ten degrees, to determine the length of the perpendicular.

## V. Problem Seventh.

The method of finding the quantity of the angles produced at the elliptic circumference, by joining the lines between the two focal points and the point of the circumference, and these are called the angles of the equation, and this serves to find the places of the planets according to the system of those who consider the orbit of the ecliptic to be elliptical. For let A B C D, (Fig. 3) be the elliptical orbit, and AC the longest, and BED the shortest diameter intersecting in $E$ at right angles, and $G H$ the focal points, and the angle of equation required to be found GTH, and T, the place of the centre of the planet moving round the centre $G$, in a mean equable motion, and $H$ the place of the spectator; and the line GH between the two centres, which in the language of astronomers is called the line of the extreme equation, is known by observation, and the angle A G T is the angle of the motion of the centre of the planet, and that is also known at all times by the mean tabular (calculations), and the angle TGH, which is the complement of the known angle A G T to two right angles, is itself known. Now let us produce GT to I, so that GI should be equal to A C, the longest diameter, whose length is $\rho \kappa$ (120) degrees; and since $\mathrm{T} \mathbf{H}$, added to $T \mathrm{G}$ is also equal to $\mathrm{A} \mathbf{C}$, so after taking away the common part TG, there remain the !equal parts TI, TH. Now let us produce T G to K , and raise on it H K , a perpendicular from the point H , and in the right-angled triangle GKH, the angle KGH which is equal to the known angle AGT is also known (Eucl. i. 15), and thus the angle KHG , the complement of the angle KGH to a right angle is known, and its side G H is known. Now the philosopher of Tús (Nassar al Din) has proved in his book called Kashf-al-Kinau (Denudatio Calanticæ), and also at the end of the twelfth chapter of the first book of the Almagest, that the proportion of the sides of a triangle, is the same as that of the sines of the opposite angles, and hence if GH be multiplied into the sine of the angle H G K , reduced, there will be found the magnitude of H K ; and if
this be similarly multiplied into the sine of the angle K H G, there will be found the magnitude of G K. Now we say, in the rightangled triangle I K H, the side I K is known because it is the sum of I G, G K which are known, and K H is known ; and (Eucl. i. 47) IH is the root of the sum of the squares of IK and K H , and is known; hence if the side H K be divided by the side I H reduced, the quotient is the sine of the angle at $I$, the are of which is the magnitude of the angle at I , and double of it (Eucl. i. 5, and i. 32) is the magnitude of, the angle HTK required, and that is what was proposed.

The last cxtract (Fig. 5.) is a specimen of the Arabic astronomical tables. The notation of these, it will be seen, is the sexagesimal Ptolemaic system, as has been cxplained in observations on extract III.

These extracts will be sufficient to give a general idea of the nature of this book, and of the extent of the author's knowledge, and I think it will be allowed that he well deserves the patronage, not only of the British Indian Government, but even of such societies in this country as take an interest in the literary efforts of the East. Unfortunately a great prejudice has for some time existed against such works, not from their contents, but from the circumstance of their being written in Persian, a language which it is now considered desirable to suppress or exterminate. Of the policy of the measures which have been taken for this purpose, or the chance of their ultimate success, I shall not pretend to give an opinion, and I have alluded to the subject only to express a hope, that notwithstanding the unfavourable state of public opinion, the recommendation which I took the liberty of making to the Government Committee of Calcutta, may have been attended with some benefit to Maulavi Gholaum Hosain.

John Tytler.

14, Avenue Road, Regent's Park, April 16, 1836.

Fig．V．

| A Table of Prine Tangents，which are also called Versed Tangents． |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Deg． | ＊ |  | $a$ |  | $\beta$ |  |
| Min． | $\begin{aligned} & \text { Tangent. } \\ & \text { Deg. Frths. } \end{aligned}$ | Difference． Nin．Frths | Tangent． Deg．Frths． | Difference． <br> Min．Frths． | $\begin{aligned} & \text { Tangent. } \\ & \text { Deg. } \quad \text { Frths. } \end{aligned}$ | Difference． Min．Frths． |
| $\begin{aligned} & \hline * \\ & a \\ & \hline \end{aligned}$ | $\begin{gathered} * * * * * \\ a, \beta . \mu \theta . \nu \epsilon \end{gathered}$ |  | $\begin{gathered} \alpha . \beta . \nu . \iota \zeta \cdot \lambda \eta \\ \gamma \cdot \nu \gamma \eta \cdot \mu \gamma \\ \hline \end{gathered}$ | $\begin{array}{r} a, \beta, v a . \epsilon \\ \zeta \\ \hline \end{array}$ | $\begin{aligned} & \beta . \epsilon, \mu \beta . \nu \gamma \cdot l \\ & \text { s. } \mu \in, \mu\} \cdot \mu \gamma \end{aligned}$ | $\begin{array}{r} a \cdot \beta \cdot \nu \delta \cdot \lambda \gamma \\ \lambda \zeta \end{array}$ |
| $\begin{aligned} & \beta \\ & \gamma \\ & \gamma \\ & \hline \end{aligned}$ | $\begin{aligned} & \beta \cdot \epsilon \cdot \lambda \theta \cdot \mu \theta \\ & \gamma \cdot \eta \cdot \kappa \theta \cdot \mu \delta \end{aligned}$ | $\nu \epsilon$ $\nu \epsilon$ | $\delta . \nu \in, \nu \theta$ є．$\nu \eta . \nu \alpha .{ }^{*}$ | ${ }_{\iota}^{\iota}$ | $\begin{aligned} & \zeta \cdot \mu \eta . \mu \beta . . \\ & \eta \cdot \nu a . \lambda \zeta \cdot \beta \end{aligned}$ | ${ }_{\mu \beta}^{\mu \beta}$ |
|  | $\begin{aligned} & \delta . \iota a . c \theta \cdot \lambda \theta \\ & \text { e. } \delta . \theta \cdot \lambda \delta \end{aligned}$ | $\begin{aligned} & \nu \epsilon \\ & \nu \epsilon \end{aligned}$ | $\begin{aligned} & \zeta . a . \mu \beta . \iota \beta \\ & \eta \cdot \delta . \lambda \gamma . k s \end{aligned}$ | ${ }_{18}^{18}$ | ．．．$\delta . \lambda a . \mu \theta$ $\quad . \nu \zeta$ ．кк．$\mu \pi$ | $\nu \beta$ $\nu \zeta$ $\nu$ |
| $\begin{aligned} & \hline 5 \\ & \zeta \\ & \hline \end{aligned}$ | $\begin{aligned} & 5.15 . \nu \theta . \kappa \theta \\ & \zeta . \iota \theta \cdot \mu \theta . \kappa \epsilon \\ & \hline \end{aligned}$ | $\begin{aligned} & \nu 5 \\ & \nu 5 \end{aligned}$ |  | ${ }_{\kappa \beta}^{\kappa}$ | $\begin{aligned} & \iota \beta . * \cdot \alpha a \cdot \lambda \eta \\ & \iota \gamma \cdot \gamma \cdot \iota 5 . \lambda \theta \end{aligned}$ | $\nu \epsilon . a$ |
| $\eta$ | $\begin{gathered} \eta . \kappa \beta . \lambda \theta . \kappa a \\ \theta . \kappa \in . \kappa \theta, \iota \zeta \end{gathered}$ | $\begin{aligned} & \nu_{5} \\ & \nu_{5} \end{aligned}$ | $\begin{gathered} \iota a . \iota \gamma . \zeta \cdot \kappa \epsilon \\ \iota \beta . \iota \epsilon . \nu \eta . \mu \theta \end{gathered}$ | $\begin{aligned} & \kappa \delta \\ & \kappa \bar{\delta} \end{aligned}$ | iठ．5．a．$\mu \mathrm{E}$ ıє．Ө．5．ע5 | $\begin{array}{r}19 \\ 15 \\ \hline\end{array}$ |
| $\begin{aligned} & \imath \\ & \imath a \end{aligned}$ |  | $\begin{aligned} & \nu \bar{\zeta} \\ & \nu \zeta \end{aligned}$ | $\begin{gathered} \iota \gamma \cdot \iota \eta \cdot \nu \cdot \iota s \\ \iota \delta \cdot \kappa a \cdot \mu a \cdot \mu s \end{gathered}$ | $\begin{aligned} & \lambda^{\prime} \\ & \lambda \beta \end{aligned}$ | $\begin{aligned} & \iota 5 . \iota \beta . \beta . \iota \beta \\ & \iota 5.1 \delta \iota \zeta . \lambda \eta \end{aligned}$ | $\kappa \ldots$ $\kappa \zeta$ $\kappa \zeta$ |
| $\begin{aligned} & \hline i \beta \\ & \iota \gamma \\ & \hline \end{aligned}$ | $\begin{aligned} & \iota_{i} \cdot \lambda \gamma \nu \theta \cdot \zeta \\ & \iota \gamma \lambda \Gamma, \mu \theta \cdot \epsilon \end{aligned}$ | $\nu \eta$ $\nu \eta$ | $\begin{aligned} & \epsilon \epsilon . \kappa \delta . \lambda \gamma . \iota \eta \\ & \iota 5 . \kappa \zeta . \kappa \delta . \nu \gamma \end{aligned}$ | $\lambda \epsilon$ $\lambda \eta$ | $\begin{gathered} \imath \eta . ३ \zeta . \nu \beta . \nu \theta \\ i \theta \cdot \kappa . \mu \eta . \lambda \end{gathered}$ | $\lambda^{\prime} a$ <br> $\lambda_{5}$ |
| $\begin{aligned} & 1 \delta \\ & \iota \epsilon \\ & \hline \epsilon \end{aligned}$ | $\begin{aligned} & i \delta \cdot \lambda \theta \cdot \lambda \theta \cdot \gamma \\ & \iota \in \cdot \mu \beta \cdot \kappa \theta \cdot \beta \end{aligned}$ | $\begin{aligned} & \nu \theta \\ & \nu \theta \\ & \nu \end{aligned}$ | $\begin{aligned} & \iota \zeta \cdot \lambda \iota 5 \cdot \lambda a \\ & \iota \cdot \cdot \lambda \gamma \cdot \eta \iota \beta \end{aligned}$ | ${ }_{\mu \delta}^{\mu}$ | $\begin{gathered} \kappa \kappa \gamma \cdot \mu \delta \cdot 5 \\ \kappa a . \kappa \kappa . \lambda \theta \cdot \mu \zeta \end{gathered}$ | $\mu \alpha$ $\mu s$ |
| $\begin{aligned} & 15 \\ & 15 \\ & \hline \end{aligned}$ | $\begin{gathered} \iota 5 . \mu \epsilon . \theta \theta \cdot a \\ \iota \zeta \cdot \mu \eta \cdot \theta \cdot a \end{gathered}$ | $\nu . *$ $a$ | $\ell$ ө．$\lambda \epsilon . \nu \theta \cdot \nu \overline{ }$ <br> $\kappa . \lambda \eta . \nu a . \mu \gamma$ | $\mu \bar{\zeta}$ $\nu$ $\nu$ | $\begin{aligned} & \kappa \beta \cdot \kappa \theta \cdot \lambda \epsilon \cdot \lambda \gamma \\ & \kappa \gamma \cdot \lambda \beta \cdot \lambda a \cdot \kappa \epsilon \end{aligned}$ | $\nu \beta$ <br> $\nu \zeta$ |
| $\stackrel{\ddots}{i}$ | $\begin{aligned} & \iota \eta \cdot \nu \cdot \nu \theta \cdot \beta \\ & \iota \theta \cdot \nu \gamma \cdot \mu \theta \cdot \gamma \end{aligned}$ | $\begin{aligned} & a \\ & \beta \\ & \hline \end{aligned}$ |  | $\stackrel{\nu}{\nu \epsilon}$ | $\begin{aligned} & \kappa \delta . \lambda \epsilon . k \zeta . k \beta \\ & \kappa \epsilon . \lambda \eta \cdot \kappa \gamma \cdot \kappa \delta \end{aligned}$ | $\nu 5 . \beta$ $\eta$ |
| ка | $\begin{aligned} & \kappa . \nu \sigma . \lambda \theta \cdot \epsilon \\ & \kappa a . \nu \theta \cdot \kappa \theta \cdot \eta \end{aligned}$ | $\gamma$ $\gamma$ | $\kappa \gamma \cdot \mu \zeta . \kappa \zeta . \kappa \alpha$ <br> ко．⿱亠䒑．七ө．к | $\begin{array}{r} \nu \theta \\ \nu \beta \cdot \beta \end{array}$ | $\begin{gathered} k 5 . \mu a . \iota \cdot \lambda \beta \\ k \zeta . \mu \delta . \epsilon \epsilon \cdot \mu \epsilon \end{gathered}$ | ${ }_{\substack{i \gamma \\ i \eta \\ \hline \\ \\ \hline}}$ |
| $\begin{gathered} \overline{\alpha \beta} \\ \gamma \\ \hline \end{gathered}$ |  | $\delta$ $\epsilon$ | $\kappa \epsilon . \nu \gamma . \iota a . \kappa \beta$ кร．$\nu 5 . \gamma . \kappa \zeta$ | $\epsilon$ $\eta$ |  | $\kappa \delta$ <br> $\kappa \theta$ |
| $\begin{aligned} & \begin{array}{l} \kappa \delta \\ \kappa \epsilon \end{array} \end{aligned}$ | $\begin{gathered} \kappa \in . \zeta . \nu \theta . \kappa \\ \kappa \Sigma . \iota . \mu \theta . \kappa \Sigma \end{gathered}$ | $5$ | $\begin{aligned} & \kappa \zeta . \nu \eta \cdot \nu \epsilon \cdot \lambda \epsilon \\ & \kappa \theta \cdot a \cdot \mu \zeta . \mu \bar{l} \end{aligned}$ | ${ }^{\bullet}$ | $\begin{gathered} \lambda . \nu \gamma . \delta, \nu 5 \\ \lambda a . \nu 5 . a \cdot \lambda a \end{gathered}$ | $\lambda \epsilon$ $\mu$ |
| $\begin{aligned} & \hline k \zeta \\ & k 5 \end{aligned}$ | $\begin{aligned} & k \zeta \cdot v \cdot \lambda \cdot \lambda \cdot \bar{\lambda} \bar{\gamma} \\ & k \eta \geqslant 5 . k \theta \cdot \mu a \end{aligned}$ | $\stackrel{\eta}{\theta}$ | $\begin{gathered} \lambda . \delta . \mu . a \\ \lambda a \cdot \zeta . \lambda \beta . \iota \theta \end{gathered}$ | $\stackrel{\iota}{\dagger}$ | $\lambda \beta . \nu \eta . \nu \eta . \iota a$ <br> $\lambda \delta . \alpha . \nu \delta . \nu \zeta$ ． | ${ }_{\nu \beta}^{\mu 5}$ |
| $\begin{array}{\|l\|} k \eta \\ \kappa \theta \end{array}$ | $\begin{aligned} & k \theta \cdot c \theta \cdot l \theta \cdot v \\ & \lambda . \kappa \beta \cdot \iota . \iota \end{aligned}$ | ${ }_{\iota}^{\iota}$ | $\begin{aligned} & \lambda \beta . . . \kappa \delta \cdot \mu \\ & \lambda \gamma . / \gamma, \iota \zeta . \epsilon \end{aligned}$ | $\kappa \epsilon$ $\kappa \eta$ | $\begin{gathered} \lambda \epsilon . \delta . \nu a . \mu \theta \\ \lambda 5 . \zeta \cdot \mu \eta \cdot \mu 5 \end{gathered}$ | $\nu \zeta$ $\nu \zeta \cdot \gamma$ |
| $\begin{array}{\|l\|} \hline \lambda \\ \lambda a \end{array}$ | $\begin{aligned} & \lambda a . k \epsilon . * \cdot \mu \beta \\ & \lambda \beta . \kappa \zeta . \nu . \kappa \epsilon \end{aligned}$ | $\begin{aligned} & 18 \\ & \delta \delta \end{aligned}$ | $\begin{gathered} \lambda \bar{\delta}, 15 \cdot \theta \cdot \bar{\theta} \cdot \bar{\gamma} \\ \lambda \epsilon \cdot \hat{\theta} \cdot \beta \cdot \beta \cdot \varepsilon \end{gathered}$ | $\lambda \beta$ $\lambda \epsilon$ | $\begin{gathered} \lambda \zeta . . \mu \epsilon \in \mu \theta \\ \lambda \eta \cdot c \gamma \cdot \mu \beta \cdot \nu \eta \end{gathered}$ | $\underset{\iota \epsilon}{ }$ |
| $\begin{aligned} & \lambda \beta \\ & \lambda \gamma \\ & \lambda, \end{aligned}$ | $\begin{array}{r} \lambda \gamma \cdot \lambda \cdot \mu \cdot \lambda \theta \\ \lambda \delta \cdot \lambda \gamma \cdot \lambda \cdot \lambda \delta \end{array}$ | $\begin{aligned} & 16 \\ & \iota 5 \end{aligned}$ | $\lambda_{\text {г．}}$ ка．$\nu \delta, \mu$ $\lambda \zeta . \kappa \delta . \mu \zeta . \iota \eta$ | $\lambda \eta$ $\mu \beta$ | $\begin{aligned} & \lambda \lambda_{1} \cdot 15 \cdot \mu \cdot \iota \gamma \\ & \mu_{c} \cdot \theta \cdot \lambda \xi \cdot \lambda \gamma \end{aligned}$ | ${ }^{5}$ |
| $\begin{array}{\|l} \hline \begin{array}{l} \lambda \delta \\ \lambda \epsilon \\ \lambda \epsilon \end{array} \\ \hline \end{array}$ | $\begin{aligned} & \lambda \epsilon . \lambda \lambda_{5} . к а . \iota \\ & \lambda 5 . \lambda \theta . \iota . \kappa \zeta \end{aligned}$ | $\begin{aligned} & \stackrel{\iota 5}{4} \\ & \angle \theta \end{aligned}$ | $\begin{gathered} \lambda \eta \cdot k \zeta \cdot \mu \cdot{ }^{*} \\ \lambda \theta \cdot \lambda \cdot \lambda \beta \mu \epsilon \end{gathered}$ | $\mu \epsilon$ $\mu \theta$ | $\begin{aligned} & \mu a . \kappa \beta . \lambda \delta . \nu \theta \\ & \mu \beta . \kappa \epsilon . \lambda \beta . \lambda a \end{aligned}$ | $\lambda \beta$ $\lambda \eta$ |
| $\begin{aligned} & \begin{array}{l} \lambda 5 \\ \lambda \zeta \end{array} \end{aligned}$ | $\begin{aligned} & \lambda \zeta . \mu \beta . a . \mu 5 \\ & \lambda \cdot \mu \delta . \nu \beta .5 \end{aligned}$ | ${ }_{\kappa \beta}$ | $\mu . \lambda \gamma . \kappa \epsilon . \lambda \delta$ $\mu a . \lambda$ г．ıท．кऽ | $\stackrel{\nu \gamma}{\nu \zeta}$ | $\begin{aligned} & \mu \gamma \cdot k \cdot \lambda \cdot \lambda \cdot \theta \\ & \mu \delta . \lambda a \cdot \kappa \zeta \cdot \nu \gamma \end{aligned}$ | ${ }_{\mu}^{\mu \delta}$ |


| Table of Prime Tangents-Continued. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Deg. | * |  | $a$ |  | $\beta$ |  |
| Min. | $$ | Differenee. <br> Min. Frths | $\begin{gathered} \text { Tangent. } \\ \text { Deg. Frths. } \end{gathered}$ | Difference. <br> Min. Frths. | $$ | Differenee. <br> Min. Frths |
| $\begin{aligned} & \hline \lambda \eta \\ & \lambda \theta \end{aligned}$ | $\begin{gathered} * \cdot \lambda \theta \cdot \mu \zeta \cdot \mu \beta . \kappa \eta \\ \mu, \nu \cdot \lambda \beta . \nu u \end{gathered}$ | $\begin{array}{r} \hline \alpha . \beta . \nu \cdot \kappa \gamma \\ \kappa \delta \\ \hline \end{array}$ | $\begin{gathered} \text { a. } \mu \beta . \lambda \theta . \iota a . к \delta \\ \mu \gamma \cdot \mu \beta . \delta . \kappa \epsilon \end{gathered}$ | a. $\beta . \nu \gamma \cdot \mathrm{a}$ | $\beta . \mu \epsilon, \lambda \delta . \kappa є . \mu \gamma$ $\mu$ г. $\lambda \zeta . \kappa \gamma . \lambda \theta$ | $\begin{array}{r} \alpha_{0} \beta . \nu \zeta . \nu 5 \\ \nu \eta . \gamma \end{array}$ |
| $\begin{gathered} \mu \\ \mu a \end{gathered}$ | $\begin{aligned} & \mu a . \nu \gamma \cdot \kappa \gamma . \iota \epsilon \\ & \mu \beta . \nu 5 . \gamma \cdot \mu a \end{aligned}$ | к5 | $\begin{gathered} \mu \delta . \mu \delta . \nu \zeta . \kappa \theta \\ \mu \in, \mu \zeta . \nu . \lambda \zeta \\ \hline \end{gathered}$ | $\begin{gathered} \eta \\ \iota \end{gathered}$ | $\begin{aligned} & \mu \zeta \cdot \mu \cdot \kappa \alpha \cdot \mu \beta \\ & \mu \eta \cdot \mu \gamma \cdot \iota \theta \cdot \nu \end{aligned}$ | $\eta$ |
| $\begin{aligned} & \mu \beta \\ & \mu \gamma \end{aligned}$ | $\begin{aligned} & \mu \gamma \cdot \nu \theta \cdot \delta . \theta \\ & \mu \in . a . \nu \delta . \lambda \eta \end{aligned}$ | $\begin{aligned} & \kappa \theta \\ & \lambda a \\ & \lambda a \end{aligned}$ | $\begin{aligned} & \mu s \cdot \nu \cdot \mu \gamma \cdot \mu \theta \\ & \mu \zeta \cdot \nu \gamma \cdot \lambda \zeta \cdot \epsilon \\ & \hline \end{aligned}$ | 15 $\kappa$ | $\begin{aligned} & \mu \theta . \mu 5 . \imath \eta . \epsilon \\ & \nu . \mu \theta . . \imath 5 . k 5 \end{aligned}$ | $\kappa a$ <br> $\kappa \zeta$ |
| $\begin{aligned} & \mu \delta \\ & \mu \epsilon \\ & \hline \end{aligned}$ | $\begin{array}{r} \mu 5 . \delta \cdot \mu \epsilon \cdot \theta \\ \mu \zeta . \zeta . \lambda \epsilon \cdot \mu \beta \end{array}$ | $\lambda \gamma$ $\lambda \delta$ $\lambda$ | $\begin{gathered} \mu \eta . \nu \Sigma \cdot \lambda . \kappa \epsilon \\ \mu \theta \cdot \nu \theta \cdot \kappa \gamma \cdot \mu \theta \end{gathered}$ | $\kappa \delta$ $\kappa \eta$ | $\begin{aligned} & \nu a . \nu \beta . \iota \delta . \nu \gamma \\ & \nu \beta . \nu \epsilon . \iota \gamma . \kappa 5 \end{aligned}$ | $\lambda \gamma$ <br> $\lambda \theta$ |
| $\begin{array}{r} \mu 5 \\ \mu \zeta \\ \hline \end{array}$ | $\begin{aligned} & \mu \eta \cdot \iota . к 5 . \iota \zeta \\ & \mu \theta . \iota \gamma . \iota 5 . \nu \beta \end{aligned}$ | $\begin{aligned} & \lambda_{5} \\ & \lambda_{\eta} \end{aligned}$ | $\begin{aligned} & \nu a . \beta . \iota \zeta . \iota \zeta \\ & \nu \beta . \epsilon \iota . \mu \theta \end{aligned}$ | $\begin{aligned} & \lambda \beta \\ & \lambda_{5} \\ & \hline \end{aligned}$ | $\underset{\substack{\nu \gamma, \nu \eta, \iota \beta . \epsilon \\ \nu \in . \iota, \nu a}}{ }$ | $\mu 5$ <br> $\nu \gamma$ |
| $\begin{aligned} & \mu \eta \\ & \mu \theta \end{aligned}$ | $\begin{aligned} & \nu . \iota 5 \cdot \zeta . \lambda \\ & \nu a .1 \eta . \nu \eta . \iota \end{aligned}$ | $\begin{gathered} \mu \\ \mu a \\ \hline \end{gathered}$ | $\nu \gamma-\eta . \delta . \kappa \epsilon$ $\nu \delta . \iota . \nu \eta . \epsilon$ | $\begin{array}{r} \mu \\ \mu \delta \\ \hline \end{array}$ | $\begin{aligned} & \nu 5 . \delta . \theta . \mu \delta \\ & \nu \zeta . \zeta . \eta . \mu \gamma \end{aligned}$ | $\begin{array}{r} \nu \theta \\ \nu \theta .5 \end{array}$ |
| $\stackrel{\nu}{\nu a}$ | $\begin{aligned} & \nu \beta . \kappa a \cdot \mu \eta \cdot \nu a \\ & \nu \gamma . \kappa \delta . \lambda \theta \cdot \lambda \delta \end{aligned}$ | $\begin{gathered} \mu \gamma \\ \mu \epsilon \end{gathered}$ | $\begin{aligned} & \nu \epsilon . \iota \gamma . \nu a . \mu \theta \\ & \nu 5 . \iota 5 . \mu \in . \lambda \eta \end{aligned}$ | $\mu \theta$ $\nu \gamma$ | $\begin{aligned} & \nu \eta . c . \zeta . \mu \theta \\ & \nu \theta \cdot c \gamma . \zeta . a \end{aligned}$ | ${ }_{1} \boldsymbol{\beta}$ |
| $\begin{aligned} & \nu \beta \\ & \nu \gamma \end{aligned}$ | $\begin{aligned} & \nu \bar{\delta} . k \zeta . \lambda . \iota \theta \\ & \nu \in . \lambda . к a .5 \end{aligned}$ | $\mu \zeta$ $\nu$ | $\begin{aligned} & \nu \zeta . \epsilon \theta \cdot \lambda \theta \cdot \lambda a \\ & \nu \eta \cdot \kappa \beta \cdot \lambda \gamma \cdot \kappa \eta \end{aligned}$ | $\begin{gathered} \nu \zeta \\ \nu \delta . a \end{gathered}$ | $\begin{aligned} & \gamma_{.}^{*} \cdot 15.5 . k \\ & \quad \text { a.t日. } \epsilon . \mu \in \end{aligned}$ | $\kappa \epsilon$ <br> $\lambda \beta$ |
| $\begin{aligned} & \nu \delta \\ & \nu \epsilon \end{aligned}$ | $\begin{aligned} & \nu 5 . \lambda \gamma \cdot \iota a . \nu 5 \\ & \nu \zeta . \lambda 5 . \beta . \mu \eta \end{aligned}$ | $\begin{aligned} & \nu \beta \\ & \nu \delta \end{aligned}$ | $\begin{array}{r} \nu \theta \cdot \kappa \epsilon, \kappa \zeta, \kappa \theta \\ \beta . * \cdot \kappa \eta \cdot \kappa a . \lambda \epsilon \end{array}$ | 5 | $\beta . \kappa \beta . \epsilon . \iota \zeta$ $\gamma . к \in . \delta . \nu \epsilon$ | $\lambda \eta$ |
| $\begin{aligned} & \nu 5 \\ & \nu \zeta \end{aligned}$ | $\begin{aligned} & \nu \eta \cdot \lambda \eta \cdot \nu \gamma \cdot \mu \beta \\ & \nu \theta . \mu a . \mu \delta . \lambda \eta \end{aligned}$ | $\nu 5$ $\nu \eta$ | $\begin{gathered} \text { a. } \lambda a . \iota \epsilon . \mu \epsilon \\ \beta . \lambda \delta . \iota . .^{*} \end{gathered}$ | $\left.\begin{gathered} t \epsilon \\ t \end{gathered} \right\rvert\,$ | $\begin{gathered} \delta . \kappa \eta \cdot \delta \cdot \mu \\ \epsilon \cdot \lambda a . \delta \cdot \lambda \beta \end{gathered}$ | $\nu \beta$ <br> $\nu \theta$ |
| $\nu \eta$ $\nu \theta$ | $\begin{array}{r} \overline{a_{1}^{*} \cdot \mu \delta . \lambda \epsilon \cdot \lambda s} \\ a \cdot \mu \zeta \cdot \kappa \epsilon \cdot \lambda s \end{array}$ | $\begin{gathered} \nu a .^{*} \\ \beta \end{gathered}$ | $\begin{aligned} & \gamma \cdot \lambda \zeta . \delta . \iota \theta \\ & \delta . \lambda \theta \cdot \nu \eta \cdot \mu \beta \end{aligned}$ | $\begin{aligned} & \kappa \gamma \\ & \kappa \eta \end{aligned}$ | $\begin{aligned} & 5 . \lambda \delta . \delta \cdot \lambda a \\ & \zeta \cdot \lambda \zeta . \delta \cdot \lambda \zeta \end{aligned}$ | $\begin{array}{r} \hline \text { a. } \gamma_{0}{ }^{*} \cdot 5 \\ \iota \beta \end{array}$ |







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Art. XVIII.-Two Plates of Coins, presented to the Royal Asiatic Society, by John Robert Steuart, Esq., M. R. A. S., \&c., \&c.

Read February 18th, 1837.
The accompanying two plates of coins present a type which is quite new to the numismatic world, if we except two or three specimens published in the second part of Vol. I., of the Transactions of the Royal Asiatic Society, from the collection of my ingenious and indefatigable friend Colonel Tod, who has left no branch of Indian antiquities unexplored or unadorned. We are informed that he met with these coins in the whole of the district from Oujein to Cutch, as far as the Indus, and lie ascribes them to the Balhara sovereigns, mentioned by the Arabian travellers of the ninth century, as translated by Renaudot, who conceives these princes to be the same as the Zamorin. In this attribution I must differ with Colonel Tod for several reasons, independent of one to which I shall now confine myself, and which is to be found in the text of the above work; viz., that the drachms coined by the Balhara princes are said to weigh one-half more than the Arab drachm, whereas the coins in question do not even reach the weight of this last.

The specimens of which I now transmit engravings, are derived from nearly the same sources as those obtained by Colonel Tod, and I am chiefly indcbted for them to the kindness and liberality of the Right Honourable Mountstuart Elphinstone, while Governor of the Presidency of Bombay.

On the first appearance of these coins, the mixed and varied character of their type was calculated to perplex the investigator. The execution bespoke a familiarity with something like Grecian art; on some of their obverses, letters, if not entirely Greek, approaching very nearly to the Greek forms; and on the reverse, legends in a character having considerable affinity to, but at the same time quite distinct from, the Sanskrit; features well defined, but, as well as the costume, exhibiting a Tartarian rather than an Indian air, were all so many apparent contradictions, which it was necessary to reconcile.

After a considerable investigation, I found the characters of the reverse to bear a great resemblance to the small specimen of the Ablaikit manuscripts, given in page 777, vol. xxx, of the Mémoires de l'Académie Royale, but as there was no Tibetan work at hand
to refer to, I procured from Europe a copy of the Alphabetum Tibetanum of Giorgi, and soon convinced myself that the characters on the coins were essentially Tibetan. In the mean time I consulted De Guignes's invaluable History of the Huns, in order to discover if any migration, or inroad, of Tartars from Tibet, had occurred in the direction in which their coins are generally found, and was gratified by meeting with the history of a tribe, to whom all the peculiarities of the coins were perfectly reconcileable.

Before proceeding further, it may be proper to give some description of the coins themselves, which arc of silver, about half an inch in diamcter, and generally weighing from twenty-eight to thirty grains each.

On the obverse is the bust of a personage to the right; and, though differing in feature on the several specimens, presenting invariably the same costume; the profile is well defined, the chin is smooth, but a long curling mustachio decorates the upper lip; the ear is ornamented with an oblong ear-ring, in the upper part of which a pearl, or jewel, appears to be inserted. Around the neck is an ornamented collar, or perhaps the embroidered border of a robe. The head is covered with a helmet, perhaps rather a hat, not differing much from that which is now in use, with a flat crown and narrow brim, and resembling that of the ambassadors from the Lama of Tibet, as delineated in Newhovii Legatio Batavica ad Magnum Cham, vol. i. p. 155. The hair to the temples seems to be shaved, but from thence it hangs down inclining backwards, in three formal curls or volutes. Behind the head there frequently occur two or more letters of a peculiar character, which are followed by several others referrible to the Greek alphabet.

The reverse exhibits a pyramidical symbol, divided into three compartments, above which is a crescent, and a sun or star; below it is a wavy line, in shape like a bow; around is an ample legend, in the presumed Tibetan character, a character which occurs frequently on the inscriptions in the numerous excavations on the N. W. side of India. Mr. James Williams, the, H. C. resident at Baroda, was, I believe, the first person who noticed these coins, having found several specimens at Buddresir, close to Mundrah, and at Raiepoor, near Mandavie, on the coast of Cutch, in the neighbourhood of some ruins and mounds of sand, probably covering further remains of antiquity; others have since been found, and transmitted to the Literary Society of Bombay, by Mr. G. P. Willoughby, as well as by Colonel Archibald Robertson, from Kandeish, and Colonel William Miles, from Pahlenpore. Considering
the frequency of these discoverics, all of recent date, and made nearly at the same time, it may be inferred that many valuable and interesting objects may yet be brought to light, were proper encouragement afforded.

The Tartar nation, to whose kings I am disposed to attribute the present coins, is that of the Yue-Chi, ${ }^{1}$ or Race of the Moon, mentioned by De Guignes in his learned Dissertation (Mémoires de l'Académie, tome xv. p. 214), on the introduction of the religion of India (Buddha or Fo) amongst the Tartar tribes; as also in his celebrated Memoirs (Ibidem, tome xxv. p. 17), on the Destruction of the Empire of the Greeks of Bactria by some Scythian tribes; these were, according to the annals of the Chinese, the Sú and the Yue-Chi. The Sú were the first to overcome the Bactrians, but they were afterwards dispossessed of their conquests by the YueChi; these latter extended their dominion over a great part of India, particularly along the course of the Indus, as far as the province of Baroach, and the temple of Somnath, in Kattywar, the precise line in which these coins are found. It appears that the Yue-Chi had been driven from their original settlements by the encroachments of the Huns, or Hun, who at the same time menaced the Chinese empire with invasion. The Chinese in consequence courted an alliance with the Yue-Chi, and the better to promote a good understanding, despatched ambassadors, who joined the horde at the moment they were invading the Bactrian and Parthian provinces, of which, in the sequel, they obtained possession. The Chinese deputation was particularly struck with the coins of the conquered districts. It is probable that the new rulers would not be inattentive or insensible to the advantages of continuing the coinage, having the artists employed in it at their command. With equal probability it may be supposed, that they would transport with them into India, a practice of which they had experienced the utility, if indeed they did not find mints already established in that portion of the peninsula which they conquered. ${ }^{*}$ Having thus far

[^74]reconciled the discordant peeuliarities in these coins, first, their belonging to a Tartar race; second, their exhibiting a tincture of Greek character and art; and third, their being found in a particular district in India, there now only remains for me to account for their legends being written in a character resembling the Tibetan.

That Tibet received its alphabet from India is deducible from various authorities. Dr. Wilkins, a most competent judge, asserts in the preface to his Sanskrit Grammar, p. xi, " that the learned languages of Tibet, of Ava, and of Ceylon, are enriched by the Sanskrit, and every one of them is indebted to it for its alphabet," and De Guignes, p. 220, of the 40 th vol. of the Mémoires de l'Académie, states, that in the latter part of the first century of our era, Samtan Poutra, a native of Tibet, on his return from India, brought back the religion of Buddha or Fó, and communicated to his countrymen laws and the art of writing. It is added, that the alphabet proving too complicated, it was modified and rendered better adapted to the genius of the language of Tibet.

In page 214, he remarks, that the conquests of the Yue-Chi, in India, must have enabled them to impart the Indian religion (Buddhism) to the other Tartar nations. In page 257, he mentions, that in the year 168 of our era, Chi-tsin, a priest of the tribe of the YucChi, reached China from India, accompanied by several other priests; and in 266 another priest again arrived in China from that part of India' which had been conquered by the Yue-Chi, and contributed materially to introduce the religion of Fó into China.

It may be here observed that the Chinese, having already written characters of their own, had no occasion to adopt those of India,
these dissensions that the Bactrians were so much weakened as to fall an easy prey to the Scythians on one side, and the Parthians on the other. This occurred about 134 a.c. How long the power of the Greeks in India survived the downfall of their bretluren in Bactria, can only be conjectured. Some information may perhaps be hereafter gleaned from coins; * hitherto, the only ones discovered are of Apollodotus and Menander. Colonel Tod has published copper coins of these princes, and Colonel Miles had the good fortune, in 1826, to recover two silver drachms of Apollodotus in the very district in which Arrian mentions them to have been current in his time.

Colonel Tod has also published four medals of Indo-Grecian kings, but they unfortunately only set forth the titles, without the names of the prince; they have every appearance of belonging to a later age than that of the three kings named above, the Sigma and Omega $\Sigma \Omega$ being written $c \omega$.-See Strabo, p. 516 ; also Trogus, Prolog., 41, and Justin, lib. 41, eap. 6.

[^75]as did the Tibetans, and probably other illiterate Tartars to whom the religion of Buddha was communicated.

On the obverse of several of the coins now under consideration, a series of letters, very much resembling those of the Greek alphabet, may be' perceived. The letters I. O.V. と. (or T.) A. C. $\Omega$. vary in nothing from those of the Greek, and the circumstance of their being unmixed with any of an Eastern form, is certainly a very singular peculiarity : the acquisition, however, of No. 29 (for which I was indebted to my friend Mr. G. T. Gardiner, then resident at Booj), showing on the reverse similar letters, combined with the Tibetan characters, has shaken my belief in their belonging to a distinct alphabet. ${ }^{1}$

It now remains for me to speak of the symbols on the reverse. The principal one seems to represent a mountain, and, in fact, closely resembles the type of the Mountain Constellation, as given in the 6 th vol. of the Asiatic Researches, p. 199. It may refer to the Mountains of Imaus, around which the Yue-Chi were at one time settled. Underneath is the figure of a bow, the obvious emblem of Tartar power. The sun and moon might refer, the one to their Eastern origin, the other to their fabled descent and their appellation of Yue-Chi, or Children of the Moon.

It is possible that the whole may express some astronomical conjunction. The figure of the mountain occurs on other ancient Indian coins, which, having been found in the same tract, may also belong to the Yue-Chi: I have given representations of them in Nos. 33 to 36.

In classing the present coins, I have been guided chiefly by the legends on the reverse, and I have invariably found that similar

[^76]heads corresponded with similar legends. This similarity of feature has also enabled me to class together several specimens in which the inscriptions were defective, and thus to complete the legend: in doing this, I have frequently been obliged to have recourse to no less than four specimens, the whole of which I have caused to be engraved, whereby the varied form of the same letters will also be more apparent. Of each inscription I have subjoined an entire specimen in a generalized form of character, for the purpose of a more easy comparison, and for the better accommodation of the learncd, who may be inclined to attempt the explanation of these coins; a task which, though unable to execute myself, I have spared no pains to render easy to those who may be able and disposed to undertake it.

In arranging the order of the coins, I have given the priority to those whose legends were simplest, and consisted of the fewest letters; and in assuming the point of commencement, I have chosen a word ${ }^{1}$ which, from its position on the coin, as well as from its occurring on every one of them, seems entitled to precedencc. This arrangement brings every inscription to end also with corresponding letters, except that in some cases, instead of the two last letters, a couple of dots are substituted, probably as a contraction, owing to deficiency of space. ${ }^{2}$

The first and last combinations, bcing the same in all, express most probably the usual titles of the sovereign ; those which vary, his particular name; and as the two former are repeated in all of the inscriptions, except one, No. 1 to 4 , I conclude that this one belongs to the founder of the dynasty, and that the others designate, besides their own, the name of their father or predecessor.

The number of the Sovereigns here represented, may be ten or eleven, which implies a dynasty of considerable duration, particularly as it can hardly be supposed that the series is complete. De Guignes was unable to ascertain how long the empire of the Yue-Chi in India subsisted; the latest date which occurs is that already mentioned of A. D. 266, giving, from the subversion of the Bactrian Empire, a period of exactly 400 years. But I trust we shall not now have long to lament the scantiness of materials for elucidating the history of this extraordinary nation, which imparted letters, religion,

[^77]and laws, to one of the most extensive regions of the globe, ${ }^{1}$ to say nothing of its influence in India, where extraordinary and numerous remains still attest the height of grandeur and civilization to which it had attained.

The similarity, if not identity, of its alphabet with that of Tibet, will, it is to be hoped, furnish a key to the sculptured monuments of Buddhism which abound throughout the North of India, and which, I believe, have hitherto baffled the investigations of the learned.

The empire over the northern and western regions of India, of a powerful (Scythian) race, professing the Buddhist religion, has been long felt and acknowledged, while the total absence of intelligible records has tormented the historian, and almost extinguished a desire for information which seemed doomed never to be gratified.

## Description of the Plates.

Plate 1, No. 1 to 28, appear to offer a series of nine different princes; their respective legends are delineated more fully in Plate 2.

Plate 2 No. 29 to 32, resemble the preceding, but are of a more barbarous character. No. 33 to 36 , are copper coins cxhibiting the symbol of the mountain. Nos. 3, 16, 25, and 28, present the obverses of their respective coins, on an enlarged scale.

[^78]MR. WATHEN'S INSCRIPTIONS, NO. IV.

Facsimile of the Devotee Chiradrva worshipping the Linga and Nandi, inseribed on the back of the first of the
Three Copper Plates containing the Inseription, No. 4.

लंकृतमहामांडलिकण्रीमारसिंहदेवः ॥ निजराजधानीण्रीकिलगिलटुर्गेमुखसन्कथाविनोटेनराज्यंकुर्वन्तिष्टन्तद्वसरेश्रीसिंहस्वरो जिफतपशुपतगागम कृताभिनववन्यः। वनावासितमृदुविरलमिलिंदसमर्पितसंस्तुतिप्रकाश:मुनीशः " टूरनिर स्तदुरितः ः्राराध्यःस
 मुमार्गीवसेश्वरपूजितोमुनिर्जयतु ॥ नदीयाग्रशिथःसमस्तागमज्ञःमदन्नोधलोभादिदोषम्टरूः। मुद्ढढ:मुवृत्तःमुधर्मपदीपः। पदातृप्र वीएोमुमुकुम्रदानः ग्रीमलयालोटेवःतस्यमहाश्यिजनपतिस्सुन्यः ग्रीमिरिंजनगरभूभूभुजामंभोनिध्युद्यदृष्षनिधिः कर्मारातीभ कुंभमुप्र हरजपनखनिकरटुर्वारसिंहःधर्माभोजप्रकाशत्कर परिएीतसिस्घांतनिन्योदयार्क: ॥ कर्मादानम्रश्ताचरएकर एपदांबुजसेवासुभृंगःनि र्मोहोनिष्कलंकोनिरतिशयतपः प्रीयुत््विद्कदेवः ॥ दानधर्मतपःशील न्सचर्यवतादिषु ॥ चिक्सदेवसमोनास्तिनमूतोनभविर्यति ॥ शकनृपकालातीतसंवत्मरशतेषु ग्रशी त्यधिकनवश्राम्द्धांकेपुपर्तयतइ्तिविलंबिसंवत्सरोपोषमासस्यगु डपष्षेसम्नम्यांवृहस्पतिवारेउदग

 ब्यतपस्विने ॥ तंग्रामंदत्तवान्श्त्यायस्स्वाम्यंतत्समस्तकं ॥ मिरिंजापुरवाहीयशिवायतनपंचकं ॥ मारसिंहमहीशेनकृतवत्कीर्ति शासनं ॥ तदायतनसंपन्न्त्तद्रामस्तनतापसः ॥ पूर्वाश्रयनदीविपः डड्याश्रयसमृध्छिकः ॥ खारंखर्यामुशोभीजपनियमसमादानसंपन्न
 मुनयस्तन्तिषंतिनान्यः॥ परमश्रीकामिनी केतनममलवचःश्रीरमावासमुग्र चर एभ्राजत्तपः्र्रीविलुलितपर कांताल यंनिन्यग्नुकरदा नण्रीसतीसंपद्मखिलयशः:्रीवधूनिजमिचकरगोलपूूतपंचायतनमनुपमंचिक्कदेवेनपूज्यं॥ बहुभिर्वमुधादत्ताराजभि:सगसदिभिः ॥ यस्ययस्ययदाभूमिस्तस्यतस्यतदाफलं ॥ स्वदत्तांपरदत्तांवायोहरेतवमुंधरां ॥ षE्टिर्वर्षस्ताशिविष्यायांजायतेक्रिमिः ॥ सामान्योयंध मेसेतुन्नृपाएांकालेकालेपालनीयोभवझ्ञि: ॥ सर्वानेतान्भाविनःपार्थिवेंद्रान्भूयोभूयोयाचनेरामभद्र: ॥ लिपिशोधात्मभूपस्यभूपा लसचिवोत्तमः ॥ लिखितंशासनंतेनचिद्कदेवः सुलश्धवान् ॥

## श्री

श्रीः ॥ जयतुजगत्त्रयनाथःसकलकलाज्ञानदाननीतिचितयः ॥ महीपतिदिव्यमहाजः कपिलजटाजूटमंडनःसांबः ॥ स्वस्ति ग्रीशिला यारवंश्रिल कोजीमूतवाहान्वयप्रस्तारम्रसव:मुवर्षांगरड्यालोललीलोध्वजी ॥ विस्तीर्यार्शवमेखलावनिवधू कानीम महीमंडलप्रस्तु न्यामलयांकसर्वनृपतिंप्रीराजविद्याधर: ॥ ञ्ररिभूमृचन्ऋवन्ऋस्तगरनगरमूपाल कस्ती ब्रतेजाःस्थिरवाक्यः शौर्यरालीनरवरपरपन्नाल टुर्गाद्रिसिंहः ॥ स्फुरितोद्यत्कीर्तिकां स्लक्षितिमहितमहामांडली काधिनाथः पर नीर जाक्षमश्रीर्जतिगनरपतिस्तस्यमूनु:प्र चंडः ॥ ञ्ररिब लसर्पपत्तिपपुरःसरनर खेचरवंश्चूडारन्नः ॥ खरकरसमप्रभःसंगररंगप्र एयिमांडलि कनिदानः ॥ गंजमग्रमुदीर्य वैरिनिकरस्यात्मीय तीवरासिनाभ्युंजततनरहाटकादिविषयंस्वांगी कृतंसर्वदा॥ मिरजादेश्मुदग्र कों कर्यमादेशंनिजनासनात् लब्धंनित्य मुदारवीरनृ पति:भ्री गोंकराजोत्तमः ॥ तस्यानुजातोनृपनीतिविद्यःहसन्सकृंंडगुणार्खावोवा ॥ लास्यंविधातानृपगूहलांकःसभ्याश्रयःमुन्ऋमपूजनेष्ट: ॥ रिपुवलसर्पमांडर्लकह्विरद्वारावज्रसाधनाधिपनिजवश्यतंचः ॥ नवराज्यसमुडरखारिवर्गनिष्कृपः ॥ नृपतिरसक्किलिगिलाच लटुर्गसमगः ॥ भूरिभूमिपतिवधसाहसांकः श्ररिराजसमुद़्रहालोलुपः ॥ पूर्वोक्तगोंकराजसर्वगुएोपेतलक्षसर्तस्यमुतः ॥ सर्वज्ञगुप्त भुवनः ग्ररिनिर्वोढपुरःसरोमहामहिम: ॥ वलवदिद्विस्स न्यक्षयकर परिपूर्यासिहस्तः ॥ दरिद्राखिलदीनानाथः । बंदिप्रकरमुदंक रोद्दानहह्तः । निभुवनतिलकःमारमिंहाग्रहर्तःमारकारश्रीरःवीरारिमद्शश्नश्रीरसिंहः गूरप्रतापनिलयः गूरगुखोदारमारसिंहनृ प: ग्रीपू र्णों वत्सराजोवरतुएगचयारूढरेखाविशुडःमीमोभीमप्रतापी निजभुजविजयीरजनीतिप्रवीयः ॥ कामी रुपप्रसन्नोधवलविम लदिग्द्रिं कीरित्रितानःरामाद्यादिक्षितिपचरितोमारसिंहावनीश: ॥ समधिगतपंचमहाशब्दमहामंडली ज्वरतगरपुरवराधी श्वर प्री शिलाहार नरेंद्रजी मूत वाहनान्वयम्रसूतमुवर्एागहडध्बजमरबकसर्पगोंकसंकका रगूहायनसिंहं ॥ रिपुमंडलिकर्खरवविद्विष्टग जकर्एरव ॥


[^79]

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## MR. WATHEN'S TRANSLATION OF THE PRECEDING INSCRIPTION.-(No. 4, of his Collection.)

Art. XIX.-Translation of an Inscription in the Sanskrit Language, and inscribed in the Purvada Halla Character, on three Copper Plates, found in the Karnataka, or Southern Mahratta Country. Dated saka 980 (A. d. 1058.)

## "Invocation."

Prosperity.-1. May that Samba, ${ }^{1}$ who is adorned with brown braided hair, from whom proceed mighty sovereigns, the source of all sciences, knowledge, charity and instruction! may this lord of the three worlds be always victorious!!

## "description of the donor's family," \&c.

Be Prosperity.-2. The frontal ornaments of the Silahar family, the increaser of the fame and power of the children of Jimúta-Váhana, on whose flag is the figure of a golden eagle (Garuda) possessor of this ocean-girt globe. A king whose praises are celebrated by the princes of the Karnataka ${ }^{2}$ country, who hath the auspicious mark called Malayanka, king of kings endued with great wisdom ; dreaded by inimical princes ; protector of the country of the city of Tagara ${ }^{3}$ (or the Tagaranagara-country-protector), "Tagaranagara-bhupalakah," of splendid fame, of unchangeable determination, of renowned valour, who dwelt as a lion in the strong hill-fort of Pannala; ${ }^{4}$ of fair and vast valour, supreme lord of great princes, who seized the treasures of his enemies; such was the king Sri-Jatiga.

His son was Sri-Gonkala-Rájá, ${ }^{\text {s }}$ an excellent prince, of great valour, the destroyer of the armies of his foes, resembling serpents; an inestimable gem of the demigod-descended race.
3. Whose majesty was dazzling as the sun ; he delighted in war, great king of kings ; one who by the fear inspired by his voice resembling the roaring of a lion, and by the dread inspired from the appearance of his flaming sword, (obtained and enjoyed the country

[^80] the whole passage is evidently inaccurate.-H. H. W.
${ }^{3}$ It merely means king of the eity of Tagara.-H. H. W.
${ }^{4}$ Near Kolapore. ${ }^{5}$ The text has Jों́क Gonka.-H. H. W.
of Kurrar. ${ }^{1}$ From the terror of his name alone the land of Mirija ${ }^{2}$ and the vast territory of the Konkan were surrendered to his dominion.) Evcr generous and ever valiant was this noble prince.

## " DESCRIPTION OF DONOR."

Sri-Marasinha-Rájá, lord of men, now reigns, famed for his science and state policy. He is of himself an assemblage of all virtucs, ever cheerful and happy, who hath the mark Guhalankha, ${ }^{3}$ whose court is the asylum of all that is great and good; who is favourable to those of virtuous conduct; as a suake so destroyeth he inimical armies; as an ankusha ${ }^{4}$ to guidc elephant-like chieftains, who is always in command of his passions, of perfect selfpossession. He showeth no mercy towards those evil princes who are seeking to usurp the kingdoms of others; (in whose possession is the strong hill-fort of Kiligila-Dúrga.) A hero conquering other powcrful sovereigns; one constantly desirous to overcome and humble conquerors; endowed with every cxcellent virtue, equal to the Sri-Gonkala-Rájá above described. Acquainted with every description of science, protector of the threc worlds; overcoming his powerful enemies, famed for being the first to rush on his cnemy in the field to battle.

His sword is all-powerful of itself to destroy his foes; the poor even can he raise to wealth, such are his riches ; continually rejoicing the hearts of his bards with gifts and largesses, whose hand is always employed in giving away in charity (such is the great king Sri-Marasinha-Déva) ; his arm is always held forth extended. His body is as that of Madana (Cupid). As a lion so doth he destroy the pride and arrogance of his foes.

A magnaninous hero, the abode of bravery, who possesseth evcry heroic virtue, ever gencrous. Such is Sri-Marasinha-Déva!

Whose wishes in every respect are completed by the favour of the divinc Lakshmi, beautiful and handsome, and in the prime of his youth.

Whose thighs are worn with marks from being constantly mounted on his war-horse.

A most perfect prince, whose propitious fortune is the dread of other chiefs.

[^81]By the force of his own arms alone, he hath obtained victory; most skilled in the art of governing; a most ambitious hero, beloved by reason of his perfect beauty.

Whose pure fame is spread over the eight points of the compass as a white ${ }^{1}$ canopy, his government resembleth that of Rama and other Rájás; such is Sri-Marasinha-Déva, lord of the earth!

- Who enjoyeth the five great blessings; who is king of kings, chief prince of Tagara city (Tagara-pura-varádhísvara), ${ }^{2}$ of the Silahar race, descended from king Jímúta-Váhana.

On whose flag is a golden eagle. In ability this prince is as the Marubaka serpent, a lion to his elephant-resembling enemies, as the moon, the boar, and the sun (possessing mildness, power, and splendour), as Parayana in appearancc. A second Vikramáditya in this kali-age, possessing many horses, much riches, and beauteous damsels.

With him is the favour and blessing of Maha-Lakshmi (the goddess of good fortune), whose court is adorned by its being the residence of many kings. (This sovereign is residing at Kiligiladurga, ${ }^{3}$ being at this place engaged in listening to the recital of pleasing tales, and in the full enjoyment of his kingdom.)

At such fortunate moment.

> " DESCRIPTION OF DONEE."

In an impenetrable forest, deserted both by animals and birds, from the dread inspired by the roaring of the lions which infested it, dwelt an holy devotee, whose praises were constantly raised by the humming of the swarms of bces, and myriads of other beautiful insects, that flew from flower to flower, and formed with their tones a delightful harmony. This pure saint had cast away from his mind all sinful desires; had attained such perfection as to render him worthy of adoration. He was paid reverence to by all princes, his devotion was most deep, the observances of his penance were most rigid. He was meek and humble, and had overcome and rendered useless the darts of Madana. His mind was free from all the cares of this sinful world, deeply was he skilled in divine knowlcdge, and well acquainted with the nature of the divine essence.

[^82]His soul was constantly united with Brahma (the almighty divine spirit), his mind was always filled with the spirit of God.

In him was no evil, no falsehood; his religious practices were most excellent; he was a person alone fit in this world to perform properly the worship of Brahma and Siva. May his memory remain for ever!

His chief disciple was Malya-Déva, one well acquainted with the Sastras, one rcleased from these evils, anger, pride, passion and covetousness.

Whose soul was firmly fixed in contemplation of the divine essence; who was an example in religion to the whole world, who was most discerning in the bcstowing of gifts.

His successor is Chika Deva, one worthy of the praise of kings. The Kalpavriksha (tree of abundance) to the sovereigns of the city of Mirija.

A lion in destroying those who forsake the right practices of religion, as a sun causing the true faith to expand its flower as a lotus, by his resplendent rays.

Who alone can explain the cstablished systems of religion and philosophy. Who is the sole true director as to the right performance of the sacred rites, from whom alone can be learned the proper modes of bestowing charity.

As a bee he remains attached to the lotus-resembling foot of the Almighty.

Who hath no worldly affections, no passions, no sins.
The rigid and austere practices of whose penance and devotion have never been cxcelled. Such is this Chika-Deva!

In charity, penance, and devotion, in all the practices of Brahma-charya, never was there one so perfect in former times, there cxists not his equal at present, nor will any one in future ages cver resemble in perfection Chika-Deva.

The period past from the æra of King Saka (Salivahana) being nine-hundred and eighty years, in numerals 980 , being the year (of the sexagenary cycle) called Vilambi, the seventh of the bright half of Pausa (month), on Thursday, on the occasion of the sun's northern declination, having washed his (Chika-Dcva's) feet, water being poured into his hands.

## "THE GRANT."

Thus:-In the country of Mirija, consisting of three thousand villages, and about four miles from Shirol, to the south of the Krishna-Vena river, and having to E. S. and W. the four villages,

Kanvada, Hardaliwada, Galkati, and Ulipahati, is situated the village of Kurandawada (Kurandwar.)

This village, with its four proper bounds, is given by me, the son of a king, to this holy saint.

All rights of sovereignty are resigned on this village.
A Panchayata of Siva, situated without the city of Mirija, is also herewith given.

Having granted these, I, the king Sri-Marasinha-Deva, have ordered this royal edict to be drawn up, and thus the devotee hath come into possession of the village and temples.

This holy Brahmana formerly wandered along the banks of the river (Krishna), but now hath he found an asylum worthy of his residence.

He hath attained the highest degree of perfection in mental abstraction; he is adorned by a constant unrufled mind, by constant prayer and by fixed devotion he hath become most pure.

Every month he performeth sacrifices, he hath the entire command of his passions and of his sensual organs. One most steadfast in the practice of the Brahma-charya rites; a reader of the holy Vedas, causing them to be read by others, by whom hath been acquired the favour of Siva.

He understandeth the first principles, a perfect Yogi, constant in the performance of his prayers.

With him reside his disciples, who are receiving his instruction, none else.

Among these five temples, the chief of which is dedicated to Siva, is one belonging to the lord of Sri-(Vishnu.) Here is penance constantly proclaiming ; here are the inimical rajás obliged to pay their tribute to the mighty king. In this sacred precinct is also deposited a treasure. These temples are always pure, being so formed that the rays of the sun always pervade them.

Such five temples, the worship of which is worthy of ChikaDeva's performance, are thus granted.
" QUOTATION FROM MAHABHARATA."
Sagara and many kings, \&c.
Ramchandra's sacred bridge, \&c.
The prince-minister (Sachivotama) having examined this document hath caused it to be written. Chika-Déra hath also received it.

Be propitious !!
W. II. Wathen.

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LIST OF KINGS IN NO. IV.
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Jímútaváhana, a demi-god called the Siláhára, whence the name of the race, who were Saivas.

1. Jatiga, who reigned at Pannalla.
2. Gonka.
3. Márasinha-déva, who appears to have reigned at Mirija.
N.B. Many names arc left out, which may be scen in Captain Grant's inscription in the "Bombay Transactions."

Art. XX.-Inscriptions from the Boodh Caves, near Joonur. Communicated in a Letter to Sir John Malcolm, G.C.B., President of the Literary Society, Bombay. ${ }^{1}$
, Read 6th July, 1833.
Destitute of the prospect of leisure to complete a general description and comparison, long since undertaken, of the cave-temples and excavations, Boodh, Jain, and Brahminical, on the western side of India, involving also the placing in juxtaposition the various inscriptions in unknown characters, to be found in these excavations, I am happy to anticipate a distant period, and at once to lay before the Society some inscriptions obtained lately from the Boodh excavations in the neighbourhood of the town of Joonur in the Poona collectorate. The multiplication of Boodh inscriptions in the hands of the learned, and the early introduction of any new inscriptions to the notice of the profound Orientalists in Europe, may facilitate the attempts now making to understand the lithographic records of a mighty pcople, who, equally with their language, have disappeared from India, leaving, however, such multitudinous and stupendous monuments of their industry, taste, power, wealth, and numbers, as to excite the most unlimited astonishment in the contemplative mind, that a great nation should have gone down the strcam of time without leaving a tradition even of its existence in its native country, the present inhabitants of Western India being more ignorant of the origin of these mighty works of art, than the European stranger who visits them from curiosity.

It is not my intention to enter into a description of the city of caves surrounding the present town of Joonur. It will be simply necessary, for the proper understanding of the locality of the inscriptions, to state that Joonur has a hill two miles to the north; adjoining the suburb on the west is the hill-fort of Sewner, and with a short break leaving a pass over it, the same hill, on which the fort stands, sweeps round to the eastward, giving a mile in extent of the hill a northern aspect. It then turns suddenly to the southward, the hill having an eastern aspect for about half a mile. Joonur thus has hills close around it on the north-west and south. These hills

[^83]are in terraces formed of horizontal strata of greenstone, amygdaloids, wackes, and basalt. The more compact strata do not readily decompose, and their lateral planes or vertical cdges present a perpendicular wall all round a hill of from twenty to three hundred feet in height, according to the thickness of the stratum. One, two, or more of these natural walls are seen in almost every hill in the Dukhun. The intermediate strata decompose, and form rapid slopes, the débris from them frequently shooting over the perpendicular wall bclow, and partially obliterating its precipitous continuity. These belts of rock therefore offer to man, from the hand of nature, impregnable fortresses in most of the hills of the Western Ghauts and their vicinity. In the face of the perpendicular walls round the hills, the celebrated caves are excavated, and in general the compactness and homogeneous character of the rock assure the excavator of freedom from impediments to the successful execution of his most extended and complicated designs.

The inscriptions numbered 1,2 , and 3 , are perfect; they are copied from two pillars at the entrance to a Boodh cave-temple, in the hill with a northern aspect, one mile south of Joonur; from the letters being less angular than usual, and from their being accompanied by many unusual marks, points, and strokes, indicating inflexions of the letters, the inscriptions may possibly be of a less ancient date than others subsequently noticed. In a gallery adjoining the temple whence these inscriptions were copied, three mutilated figures of Boodh, so much injured as scarcely to admit of the sex being determined, have been converted by the Brahmins of Joonur into representations of the Hindoo divinity Parwutee, under her names of Ambah, Ambeekah, and Ambaleekah. I found a Brahmunee woman and her son busily employed in washing them with turmeric water, and offering rice and betel-nut to them. I mention this, as it is a generally received opinion, that Brahmins do not worship mutilated images, much less Boodh figures; similar adoptions, and similar worship, however, will: be found in the Karleh Boodh cave-temple, in some of the caves at Ellora, and in the Lainahdree caves at Joonur.

Inscriptions 4 and 5 are copied from the walls of a large square chamber, by the side of the road at the west of the Nane Gliat. This chamber commands a view down the Ghat and over the Konkun or country below the Ghats; three walls (the south side is open to the road) have been covered with inscriptions, but the decomposition of the rock from moisture has occasioncd great oblitcrations. Inseription No d, however, which is in a continuous line
round the three sides of the chamber, immcdiately under the ceiling, is perfect as far as it goes, with the exception of fifteen or sixteen letters. No. 5 is a partially obliterated inscription on the eastern wall of the same chamber, but in some of the lines there are so many letters in continuation, as to justify the hope that information may ultimately be extracted from them. The inscriptions on the southern and western walls have too many lacunæ to render them worthy the labour of copying. Less attention appears to have been paid to the perfect formation of the letters in these inscriptions than is usual in Boodh inscriptions; they bear marks of having been quickly done, as a person writes when careless or in haste. The chamber was probably intended as a resting place for persons passing the Ghat, as there is a stone seat all round the bottom of the walls, and some reservoirs for water, and one or two other unfinished chambers are excavated close by. This ghat, or pass down the mountains, is on the direct line of communication from the ancient Deoghur, near Dowlutabad, passing through Joonur with its city of Boodh caves to Callean, known as the Calliara of the Periplus, and thence probably the road continucd to that other city of Boodh caves in Salsette.

Inscription No. 6 is from the wall of a verandah to a cavechamber in the rock under the hill-fort of Sewner. The western and eastern lateral plancs of the stratum of rock, on which the fort stands, are pierced with excavations, temples, halls, cells, and reservoirs for water. Above is the fort in which the celebrated Seewajee was born. The inscription No. 6 appears to be perfect, with the exception of eighteen letters, the places of which are marked by small crosses.

No. 7 is a perfect inscription, on the wall of a cave-temple under the fort, in which stands a very large isolated dhagope, a short cylindrical emblem, with an hemispherical top, usually crowned by an umbrella or a laboured crest or process. A sketch is given of this emblem in an accompanying sheet. Mr. Erskine considers it to represent the tomb in which a relic of Boodh is usually buried. The flat cciling of this temple is chunnamed and painted in small squares, each square having concentric circles of white, orange, and brown. The colours are still sufficiently marked.

No. 8 is an imperfect inscription in the face of the rock over a reservoir for water. The first threc letters are wanting, and twenty other letters are effaced in subsequent parts of the inscription.

Inscriptions Nos. 9, 10, 11, 12, and 13, are from the cxcavations called the Lainahdree caves, in the hill two miles north of Joonur.

The whole of them are quite perfect. The principal temple, in its design, resembles the Karleh temple, but it is smallcr. There are octangular pillars on cach side, on whose capitals repose two clephants, or two lions. The roof is arched, and appears supported by stone ribs, whose ends rest between the elephants on the summit of the pillar, a sketch of onc of the pillars accompanies the inscriptions. The proportions throughout are good, the design tasteful and ingenious, and the execution very perfect. The inscription No. 10, is over the doorway to this temple, within the vestibule; the letters are very large, well finished, and quite distinct. No. 9 is a perfect inscription over a door to a small hall with dormitories round it, a little to the eastward of the temple just mentioned. Almost adjoining the large temple on the west, there is a large hall without pillars, 57 feet broad by 51 in depth. The hall has a stone seat all round the walls, and there are eighteen cells in the west, north, and east walls; each cell has a stone couch for its former occupant. It is remarkable that this refectory and dormitory appending on the Boodh temple have been taken possession of by the Hindoos. A recess has becn excavated in the northern wall, and a gigantic figure of Gumputtee, the son of Mahadeo, is in it, either chiselled out of the rock, or placed there, I could not determine which. The Brahmins insist upon this figure of Gunputtec being one of his eight spontaneous manifestations; there is a yearly pilgrimage to it, and it is in high reputc. This figure is called Usht Wecnaek, from Usht and Weenaeek, a name of Gunputtee. An avenuc of trees runs up to the cave from Joonur, said to have been planted by Amrat Rao, the adopted son of Raghoba, the late Peshwa's father. On the western wall, between the doors of two cclls, there is an unfinished copy, in the most faint outline, of one of those sculptured stones, so common in the Mahratta country, representing the worship of the Leeng in the upper compartment, and combats in the lower compartments.

The inscription No. 11 is in a panel in the rock, over the left cistern, near the large reservoir for water, considerably westward of the great hall just mentioned. No. 12 is in a similar panel over the right cistern near the great reservoir. No. 13 is a perfect inscription in a panel in the rock near the most western chambers. The ground of the panel has been covered with a reddish, indurated ochry matter, which is in cxcellent preservation, and the letters appear to have been cut through it, In the neighbourhood of this inscription, another pancl has been chiselled, smoothed, and prepared for an inscription, but the design was not perfected.
${ }_{5}$ In concluding my notices of these inscriptions, I beg to call the attention of the Society to the very singular fact, that in comparing Boodh inscriptions with very ancient Sanskrit inscriptions, Boodh letters are discovered in the latter; and the prevalence of Boodh letters is in the ratio of the antiquity of the Sanskrit inscription. I have identificd forty-five Boodh letters in the ancient Sanskrit inscriptions to be met with in the volumes of the Asiatic Researches. Can it be that these letters are a very ancient form of the Sanskrit alphabet, and that the inscriptions themselves are in the Sanskrit language ? The variations in the forms of the letters in the above Boodh inscriptions, would seem to indicate that some of them are of different ages.
(Signed) W. H. Syees.
Poona, August 1, 1828.

Since the above paper was sent to the Literary Society of Bombay, the volumes of Sir Stamford Rafles on Java fell into my hands, and on turning to copies of the ancient inscriptions in Java and Bali, I was struck with the identity of some of the letters in the Boodh inscriptions in the Dukhun, with those in the "Aksara budda" or ancient alphabet of Java, and with those in the "specimen of an inscription in the ancient Javan or Kawi found in Malcng." As the powers of the letters of the Javan-Boodh alphabet appear to be still known, they might possibly be successfully applied to decipher Boodh inscriptions in India necessarily fraught with the highest interest, as they involve notices of people, the predecessors of the present races of inhabitants; a people of whom not a tradition remains, but whose extended range of occupancy is attested by their wonderful cave-temples, occurring at intervals from Boodh Gyia to Salsette. I have not had leisure to go into dctails, nor make rigid comparisons of the respective inscriptions of Java and India, but hope my notice may induce some more competent person to work out the subject.

W. H. Sykes, Lieutenant-Colonel.

London, June 6, 1832.

Art. XXI.-Translation of the Gencral Sirozé of the Pársis. By John Wilson, D.D., President of the Bombay Branch of the Royal Asiatic Society, and Missionary of the General Assembly of the Church of Scotland. Communicated by the Bombay Branch Society.

Read 1st July, 1837.
In the third volume of Anquetil du Pcrron's translation of the Zand-Avastá, there are versions of two small liturgical works of the Pársis, entitled by him the "Lesser Si-roze," and the "Greater Sirozé." There is another Sirozé, howevcr, possessed by the Pársis, which he does not translate. It treats of the qualities of the thirty days of the month, as auspicious or inauspicious. Though its intimations are absurd in the highest dcgree, it exercises great influence over the whole body of Zoroastrians. It is so much regarded by them, that there is scarcely a family without a copy, and there are few individuals who have not its precepts written on the tablet of their hearts. On this account, as well as because of the brief information which it gives respecting the Amsháspands and Izads, to whom the days of the month are sacred, it is not unworthy of the attention of Europeans. It exists in the Pcrsian language; but there are several Gujaráthí versions, which are generally used. ${ }^{2}$ The translation which I give is very literal, and is formed from a collation of these versions, and a careful comparison with the original. I have added á few explanatory notes. The only gencral remark which I would make on the Precepts of Fate which this Siroze contains, is that its framers scem to have made such a distribution of good and evil throughout the month, and its different days, as is calculated to render those who credit it, neither much elated, nor much cast down, on account of any of its portions. Blessings and curses are made to go hand in hand during the wholc journey of the moon.

The following is a list of the names of Celestial Beings who preside over the days of the month, as given in the Pehleví Farhang. It may prove useful in the deciphering of ancient inscription.Anaháma, Valúman, Antavchest, Satnivar, Sapandomad, Khundad,

[^84]Amunndad, Atump-de, $\Lambda^{\prime}$ tun, $\mathrm{A}^{\prime}$ wán, Khor, Máhá, Tír, Gos, De-panmatun, Matun, Saruz, Rashnán, Parwardín, Warahrám, Rám, Wád, Dep-dín, Dín, Ard, A'stád, A'smán, Zamiád, Másarazpand, Anerán.

## I.

Let it be known to all that the first day of the month of the Behedin, is that of the god Hormazd. ${ }^{1}$ This day is reckoned auspicious for all good undertakings, especially such as commencing new buildings, sending children to school (for the first time), and commencing the cultivation of a field or garden. It is auspicious for all kinds of consultation, for selling and for buying, for uniting together, and for marrying; for dressing in new clothes, and for cutting nails. Shaving, going to the bath, and perjury, on this day, meet with instantaneous punishment from God. If a person be taken ill, he will soon be restored to health. The day is well adapted for a short journey. If a person may have mislaid any thing, he will recover it. Should a child be born, it becomes very fortunate, and enjoys long life. Dreaming is attended with good; and the dream ought not to be revealed to any person, till its result be known. The signification of a dream will be manifested, and not occult. What has now been stated accords with experience, through the divine power. We have not divine authority for our statements.

## II.

The second day is that of Bahman, the angel who presides over the increase of mankind, and protects horses and goats. It is a fortunate day, and well suited to sensual indulgences, to the performance of marriage-ceremonies, to the drinking of wine, ${ }^{2}$ to putting on new clothes, to scraping nails, to forming new hopes, to contracting friendly alliances, and to giving instruction. Taking medicine and riding on horseback are on this day detrimental. It is fortunate for visiting a king, and for holding consultations. The child born this day is of a comely figure, but is possessed of neither good talents nor sense. The illness of a person who is attacked this day, will be long in duration, though he may recover. If any thing be lost or missing, it will be found. Should a tree be planted, it will wither, or its fruit will not be good. Events dreamt of, will occur in four days, but the hopes which may be cherished will be disappointed.

[^85]
## III.

The third day is that of Ardebehisht, the angel who is the guardian of firc. ${ }^{1}$ This day is inauspicious; we should desist on it from doing any work. Fire must be worshipped. Nothing else must be done, lest its issue should prove unfortunate. It is to be maintained that whoever shall work this day, will repent it at the end. The day is certainly not good for selling and buying. The child born this day will be miserable, stupid, and deceitful, during a long life. Good reports are neither to be approved nor credited. The visions of dreams will not be realized. Should a person fall ill, his life is in danger. If any thing be lost, it will never be recovered, unless by a special interposition of Providence.

## IV.

The fourth day is that of Sháhravar, the angel who presides over hills and mountains, and over mines, gold and silver. This is a good day; and it is suitable for diversion, for marriagc-ceremonies, and for contracts. It is auspicious for erecting buildings, for cultivating land, for selling, buying, and laying new foundations, for going to the court of a magistrate, for treating an enemy with hatred, for going to the court of a king, and forming hopes, and for purchasing a horse. But proceeding to a foreign country, putting on ncw clothes, and going to a bath, are forbidden. The child born this day becomes very virtuous, and speaks but little; and on any person exacting obedience from it, he will be respected. The person who gets indisposed on this day will specdily recover. The visions of dreams will be speedily realized. An article lost or missing will soon be found. There will be truth in reports heard.
V.

The fifth day of the month is that of Sphandarmád, the protcctor of animatcd beings. This day is unfortunate; and consequently we must refrain from doing any work. Prayers may be made in private; and, by all means, we must keep ourselves quiet. The day, however, is well adapted to commencing the perusal of a book. On this day we may sail across a river, ${ }^{2}$ and make the carth joyful. Nothing else ought to be done. If a person happen to fall ill this day, he will not soon recover, and if he does not improve within five days, he will probably die. The child born will be fortunate and

[^86]courageous. The visions of dreams will have a spcedy realization. Things which are missing or mislaid, will never be recovered. Reports heard on this day will prove insignificant, or be afterwards contradicted.

## VI.

The sixth day of the month is that of Khurdád, the angel who presides over water and vegetation. It is a fortunate day and auspicious for sowing seeds, and planting trees; for drinking wine, and opening veins; for setting out on a long journey, and marrying. But no new hope should be entertained. The day is suitable for shaving, for scraping nails, and for going to a bath. The child born this day will prove of bad character and qualities. Those who fall sick will soon be restored. The visions of dreams will be realized before the close of a day. Whatever may be lost or mislaid, will never be recovered. Rumours will not be contradicted, but prove true.

## VII.

The seventh day of the month is that of the Amsháspand (archangel) Amardád, who presides over trees and grass. This is not a good day; and during it no work should be performed. But the worshipping God (by offerings) and praying to him publicly, and any thing of a like nature may be done. Great men must not be visited this day. The child born, will either speedily die, or if it live, will prove a bad one. The day is auspicious for forming unions, for learning science, and casting a malicious look at an enemy. The person taken ill will be in danger of his life; and the good or bad results of a dream will be known within twenty days. Any thing lost or mislaid will not be recovered. Rumours will not prove false. ${ }^{1}$

> VIII.

The eighth day is denominated from Dépádar Izad. It is a lucky day. Selling and buying, laying new foundations, dressing in new clothes; and bathing, and drinking wine, are proper. It is also good for eating and drinking, and marrying, when music is laid aside. It is good in like manner for travelling. But planting young trees, and commencing new works are forbiddelı. No war or negotiations ought to be made this day. The child that is born will

[^87]prove honest, and expert in reading and writing and other kinds of learning. He will be the instrument of good to others. If a person be taken ill this day, he will probably soon recover; but if he continue ill for twenty days, he will certainly die. Should any thing be lost or mislaid, it will be found. The visions of dreams will be realized within ten days. The intelligence which may be heard, will be partly false, and partly true.

> IX.

The ninth day of the month is denominated from Adar, the angel who presides over fire. ${ }^{1}$ This day is inauspicious and unlucky. There should be cessation from labour during its continuance: The child born this day will be dislonest and mischievous, cowardly and guilty of manslaughter, and of a malevolent disposition. If any thing be mislaid or lost, it will not be found. Should any person get ill, he will continue indisposed for a long time. The visions of drcams will be realized within a fortnight. The intelligence received this day will prove false.

> X.

The tenth day of the month is denominated from Awán Izad, ${ }^{2}$ who presides over water. The day is lucky, and may be used for all good works. Commencing cultivation, laying the foundations of buildings, purchasing cattle, ${ }^{9}$ putting on new clothes, cutting out new clotles, and discharging debts, are proper. Should a person start on a journcy this day, he will get possessed of immense property and wealth. But the day is not good for fighting battles, or holding negotiations; for depositing money, bathing, scraping nails, and sitting in water. The child born this day will be wealthy, and prove a blessing to its parents; and it will enjoy long life. If any thing be mislaid or lost this day, it will be recovered. Should any person get unwell, he will either recover within eighteen days, or will die after that time. The visions of dreams will be realized within ten days. The news heard will prove true.

## XI.

The eleventl day is that of Khúrshed, the angel who presides over the sun. This day is auspicious, and proper for all good works. Whatever work is required may be performed; but marriage, sensual pleasures, and setting out on a journey, are to be avoided.

[^88]Should any person pray to God, he will obtain his dcsires. The child born this day, will be possessed of good talents, and will become learned, and enjoy many comforts. He who stcals any thing this day, will soon be punished. He who falls sick, will soon recover. If any thing be lost or mislaid, it will be found again. The news heard will prove true.

## XII.

The twelfth day of the month, is that of the angel Muhu, ${ }^{1}$ who takes care of cattle. This is an excellent day. All sorts of amusement, and diversion, and enjoyment, visits to ministers, and consultations with them, and the maltreatment of enemies, are lawful. The visions of dreams will be realized within three days. This day is favourable for the cultivation of land, and the prosecution of learning. But it is not good for depositing money, and for killing and cating cattle. ${ }^{2}$ Should any one wish to recommence a work which was discontinued, he should twice pray and practise genufiexion; and after his morning prayer is finished, the sun, the illuminator of the universe, must be invoked. But the prayer should be offered from the terrace of a house or from the summit of a mountain; the prayer is then immediately granted. The child born this day becomes very enterprising and fortunate. Should the public send any person on deputation, the day will prove lucky. If a person fall sick, he will soon recover his health, though he may suffer great distress. What is lost will be recovered. The visions of dreams will be immediately realised. The news heard will prove true.

## XIII.

The thirteenth day of the month is that of Tir, the angel who presides over clouds and rain. This day is inauspicious; no work ought to be performed during its continuance; but it is suitable for worship, prayer, and sacrifice. Should any one form new desires, they will be successful. Should any one contract a friendship or effect a reconciliation, he will be injured. There ought to be no shaving, or scraping of nails. It is not probable that a birth will occur this day; but should a child be born, it will prove wicked and debauched. If any one become unwell this day, he will recover. If one be attacked with fever, he will be better within twenty-eight
${ }^{1}$ Or Mah.
${ }^{2}$ This day is on the same footing with regard to animal food as that of Bahmas, already noticed. Mr. Erskine, I may here remark, is not strictly correct, when he says that the Parrís have no fasts.
days. Articles lost will not be again found. Dreams will be realized within forty days, and news will prove false.

## XIV.

The fourteenth day is that of Ghosh, the angel who presides over animals. ${ }^{1}$ This is a good day, and suitable for selling and buying, for conferring benedictions, opening veins, dressing in new suits, taking medicine, and making the earth flourishing, for sport and amusement, for giving in marriage, and for making private negotiations. The child that is born will be a poet and an astronomer, and fortunate and wealthy. Should any thing be lost or mislaid this day, it will be recovered. If a person fall sick, he will soon be restored. The visions of dreams will be realized within twenty days. The news heard will prove true.
xV.

The fifteenth day of the month is called Depméhér, the Izad who presides over all the languages of the world, These languages are seventy-two in number, as known to the glorious God, and to ourselves. This is an auspicious day, and is suitable for all kinds of good undertakings. This day should be devoted to charity and prayer. Reconciliation may be made with friends; estates may be purchased; baths may be attended; heads may be shaved; children may be sent to school; and hopes may be entertained. But none should set out on a journey, or deposit any article with others. The child born this day, will be universally beloved, and expert in the use of bows and arrows. His death will occur in the first month of a year. The visions of dreams will be realized the same day. Should any one pray twice this day, and supplicate for any thing, he will readily obtain it. He who is ill will soon get well. If a person be imprisoned, it will be long before he will be set free. He will be frightened. Evil decds should be refrained from. News will prove true.

## XVI.

The sixteenth day is that of Meher Izad (Mithra), the angel who resides with the sun and presides over the blossoming of trees. It is a lucky day. Selling and buying, planting trees, and cultivating fields, purchasing land, giving entertainments, travelling, opposing an enemy, indulging in amusement, drinking wine, entertaining new hopes, and, in a word, all pure works, are on this day auspicious.

[^89]But shaving, going to a bath, anointing the body, sensual enjoyments, and putting on a new jámá, ${ }^{1}$ are prohibited, lest great evils should accrue. The child born this day will become a notorious liar, and daring blasphemer. Marriage is on this day auspicious. If any one become unwell, he will be restored within five days. If any thing be lost or mislaid, it will be recovered. The visions of dreams will be rcalized before the close of the day. The news heard will mostly be true.

## XVII.

The seventeenth day is that of Serosh, the angel who presides over learning. ${ }^{2}$ This is an inauspicious day; all work should be laid aside. Worshipping, praying, entertaining hopes, visiting kings and great men, and returning home from a foreign country, are good. The child born will enjoy long lifc, and become a drunkard and debauchee. Should any one contract a friendship this day, the friend will prove a foe. Should any one be attacked with illness, or fever, he will not live, but at the end of seventeen days he will die. If any one be committed to prison, he will either come out within ten days, or meet death. All the visions of dreams will prove false. If any thing be lost or mislaid, it will be recovered. The news heard will prove true.

## XVIII.

The eighteenth day of the month is that of Rashné, the angel who presides over truth and righteousness. ${ }^{3}$ It is an auspicious day. For recreation and amusement, for selling and purchasing, for aspiring at something new, and for taking medicine, for bathing, and for shaving the head, it is particularly suitable; but for scraping and cutting nails, putting on new clothes, drawing blood, or drinking wine, it is unsuitable. Should any person take medicine on this day, he will experience a speedy cure, and continue well for a year. The child born this day will become a good man, and be cndowed with a calm and modest disposition. Should any person get unwell, he will soon recover. The visions of dreams will be fulfilled within sixteen days. If any thing be lost or mislaid, it will be recovered. The news heard will prove true.

## XIX.

The nineteenth day is that of Farvardin, the angel who presides over

[^90]Paradise, ${ }^{1}$ and over the souls of men. This day is very auspicious. A journey may be commenced, deposits may be made. Illuminations and marriages are proper. Presents may be given, consultations may be held. The fire temple of Behrám ought to be attended, ${ }^{2}$ but not that of Adarán. Blood may be drawn; all kinds of bargains are auspicious. But the foundations of buildings ought not to be laid, lest they should soon be injured. New clothes should not be put on, and nails should not be cut. The child born will be of a beautiful form, and excellent disposition. If a person fall ill, he will long suffer, but he will eventually be restored. The visions of dreams will be realized in eight days. The things lost or mislaid will be recovered. News will prove false.

## XX.

The twentieth day is that of Behrám, ${ }^{3}$ the angel who presides over travellers. It is a good day; worship ought to be performed, and alms dispensed. Consultation may be held with an enemy. Good things may be desired. Should a person start on a journey, he will acquire considerable wealth, and will return in safety. New clothes should not be put on, and no marriage or amusement should take place. The child born will prove a poet and an astrologer. The visions of dreams will be realized within ten days. If any thing be
${ }^{1}$ Behisht.
${ }^{2}$ The A'tish Behrám is said to be composed of 1001 kinds of fire. The temples in which it is deposited are six in number, and their locations, \&c. are as follows:

1. Umarsárí. The temple at this place was erected by Anjumán of Sanján, in Samvat 777, or A. D. 720.
2. Nausárí. The temple here was erected by Desaí Kharsedji, in Samvat 1822, i. e., A. D. 1765, and couseerated by Dastur Sohorabjí Rastamjí.
3. Mumbaí. (Bombay). The first temple was ereeted by Dádábhái Nassarwánjí, in Samvat 1838, or A. D. 1781, and consecrated by Dastur Mulla Káwas, the father, I suppose, of Mulla Firuz.
4. Surat. The first temple was erected by Dádábháí Nassarwánji, and Shet Hormasdji Bahmanji, in Samvat 1880, or A. D. 1823, and conseerated by Dastur Edaljí Dórabjí Rustamjí Sanjíná.
5. Surat. The second temple was erected by Pestanji Kálábhai Wakil, and conseerated by Dastur Sohorábjí Jamshedjí, the famous Zand scholar, in Samvat 1880, or A. D. 1823.
6. Mumbaí (Bombay). The second temple, which is more frequented than any in Bombay, was ereeted by Wádiájí Shet Hormazdjí Bahmanjí, in Samvat 1887 , or A. D. 1830, and consecrated by Dastur Edal Darú Sanjana, the Highpriest of the Shehersháhis, the most numerous of the two sects into which the Kabísa controversy has divided the Pársís of India.
${ }^{3}$ The temple of Behrám is much frequented on this day.
lost, it will be recovered; and if a person elopes with any article, he will be seized and punished. News heard will prove true. If a person get unwell, he will be in danger of his life. All this is agreeable to our experience, as God knows.

## XXI.

The twenty-first day is that of Ram, ${ }^{1}$ the angel who presides over destiny. ${ }^{\text {g }}$ This is a good day. Worship may be performed, hopes entertained, blood drawn, and cattle purchased; but shaving, bathing, and cutting nails, are forbidden. The child born will be miserable and ill-looking. If a person get unwell, his life will be in danger. The visions of dreams will prove delusive. Whatever may be stolen or mislaid will be recovered. News heard will prove false.

## XXII.

The twenty-second day of the month is that of Guvad (Vad), ${ }^{3}$ the angel who presides over the winds. It is a good day. The purchase and ornamenting of cattle are proper. Work should be deliberately done this day; for if it be rashly done, the issue will be bad. Should any person start on a journey, he will encounter many difficulties, but at the end he will accomplish his objects. News heard will prove true. The child born will be circumspect. In the first stage of life he will experience misery, but in the last he will possess riches. If any person get unwell, he will soon be restored. The visions of dreams will be realized. If any thing be lost or mislaid, it will be recovered.

## XXIII.

The twenty-third day of the month is that of Deh-Dín, who is God himself. This is an inauspicious day. All works should be suspended; but God should be worshipped and adored. Selling and purchasing, dressing in new clothes, starting on a journey, taking amusement, and marrying, are proper. A person guilty of perjury to-day, will be immediately punished and disgraced by God. If a child be born it will enjoy long life. A person who may get unwell will arrive at the point of death, yet God will eventually restore his health. Whatever may be dreamt of ought to be kept secret. If any thing be lost or mislaid, it will be recovered. Reports heard will prove true, as God knows.

[^91]
## XXIV.

The twenty-fourth day of the month is that of Dín, the angel who presides over the Mázdiasnan ${ }^{2}$ religion. It is an auspicious day, and suitable for approving works. During it amusements, marriages, and the laying the foundation of new houses, are proper; no other kind of work should be done. The child born will be a blessing to its parents, and become possessed of great property. Should any person be taken ill he will soon be restored. The visions of dreams will be realized before the close of the day. Should any person run away he will get into difficulties, and will speedily return. Reports heard will prove true, as God knows.

## XXV.

The twenty-fifth day of the month is that of Ashasang, the angel who presides over religious mendicants. It is an inauspicious day, and during its continuance all works should be laid aside. But hopes may be entertained, because they will soon be fulfilled. The child born will suffer illness and pain, or will meet with a violent death. If a man fall ill, it will go hard with him. The visions of dreams will be bad, and their issue unpleasant. They will be realized within five days. The news heard will prove false.

## XXVI.

The twenty-sixth day is that of Ashtád, the angel who presides over the seeds of the earth. This is a good day, and proper for all good works. New works may be commenced this day, buildings may be begun, wine may be drunk, journeys may be entered upon, and there may be selling and buying. The child born will live in poverty, though called to labour hard. The person who becomes unwell will soon be restored. Whatever may be lost, or missing, will be recovered before the day close. The visions of dreams will be realized within ten days. News heard will prove true. Weddings which take place to-day, will end in future divorces.

## XXVII.

The twenty-seventh day is that of A'smán, the angel who presides over heaven. It is an excellent day, and is suitable for work. It is suitable for despatching a messenger or a letter, for drinking wine, for putting on new clothes, for shaving, for forming new desires, for marrying, and for forming connexions. But it is inauspicious for

[^92]drawing blood. The child born will prove correct in morals, and fortunate. Whoever may be taken ill will soon be restored. Whatever may be lost or stolen, will soon be recovered. The visions of dreams will be realized within ten days. News heard will prove false.

## XXVIII.

The twenty-eighth day of the month is that of Zamiád, the angel who presides over fruit-bearing trees. This is an indifferent day. All work should be desisted from. A journey is not good. No deposit should be made. Few children will be born this day; and such as are born, will speedily die. The visions of dreams will soon be realized. Should a person elope, he will be apprehended. Should a person be taken ill, he will speedily recover. News heard will prove false.

## XXIX.

The twenty-ninth day of the month is that of Máharaspand, the angel who presides over paradise. It is a good day, and suitable for labour. Setting out on a journey, forming new projects, reading the Zand-Avesta, are becoming. But no will should be written. The child born will prove upright. If a person be taken ill, he will shortly be restored. The things lost will not be recovered. The man who elopes will not be apprehended. The news heard will prove truc.

## XXX.

The thirtieth day is that of Anirán, the angel who presides over marriage among mankind. It is a good day. For drinking wine, for sensual pleasures, for maltreating enemies, for purchasing cattle, the day is well adapted. : And it is also good for drawing blood, for taking medicine, for worshipping God, for forming new projects, and for marrying. The child born will be a speaker of truth and prove honcst. The person who gets unwell this day will be in danger of death. The visions of dreams will soon be realized. Whatever be taken away or lost will be restored. The news heard will prove false.

Art. XXII.-History of Tennasserim, by Captain James Low, Madras Army, M.R.A.S., \&c. \&c.<br>(Continued from page 108.)

## CHAPTER XIII.

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THE MILITARY RESOURCES OF THE SIAMESE, PARTICULARLY CONSIDERED, WITH
    REFERENCE TO FORMER TIMES AND THE PRESENT PERIOD.
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It has been uniformly acknowledged by those travellers who have visited Siam, that scarcely any correct knowledge can be gained of its institutions and resources, beyond what may be gathered within a very confined range of personal observation.

It is the aim of the court, and the duty, if not the inclination, of the people, consequent on their state of political degradation and slavery, to involve a stranger in a constant delusion regarding all that conccrns them and their country. And while they distort or magnify such pieces of intelligence as their interest prompts them to communicatc, they carefully block up every avenue to truth, which they wish to kcep concealed.

Such being the case, and the British political rclations with Siam still continuing in a very restricted state, the remark of an eminent Oriental geographer may be here very aptly applied, that "we must be content to receive our information in the form in which it can most conveniently be collected." ${ }^{1}$

In the present instance information has principally been obtained from personal observation and direct intercourse with the natives of the countries alluded to. Several of the Siamese having been suspected by the court of giving me intelligence of a nature which it is considered treason to reveal, were outlawed; which shows that they were considered by it to be capable of making disclosures.

The $T^{\prime}$ hai race lays claim to a higher degree of political address, and to superior sagacity in the conduct of warlike operations, than they are willing to allow to their neighbours. Perhaps these points may be conceded in their favour; and particularly as regards the Burmans, who, from being of a more impetuous character, are less disposed to adopt disingenuous practices: and whose uniform success during a long course of encroachment on the states in their
vicinity, had rendered it less requisite for them to disguise their sentiments. In so far as respects letters, the Siamese deserve the first rank, in a comparison betwixt them and the Burmans, Peguans, Laos, and Cambojans.

The Burmans claim the pre-eminence in the field : and it may be perhaps assumed, that were equal numbers of them and of the Siamese to be opposed, other advantages being equal, the former would prove the strongest. On the other hand it may be instanced, in proof of the Siamese not being much inferior to the Burmans, and not at all so to the Laos and Cambojans, in the quantity of the materiel used in their common modes of warfare, or in the tact and resolution requisite to employ it with effect, that they have always extricated themselves from difficulties, and have often been the attacking party on these several nations. We know likewise that the large force which was, about the year 1810, sent against Junkceylon, was nearly annihilated by the Siamese.

It would not be a fair way of proceeding, were a comparison to be drawn betwixt the military character and resources of the Siamese, and those of any European nation. The object in an investigation of this kind ought to be to assign to the people, with reference to these two particulars, their proper station in the chain of warlike nations. And if facts should induce us to allot to them a very inferior link in it, we ought, at the same time, to make due allowances for those habits of mind which have been formed, fostered, and regulated by unvarying civil institutions.

The courage of a perfect savage often differs not more from that exhibited by a half civilized people, than the courage of this last generally does from the intrepidity of the European or Arab, or even the bravery of the races in the north and west of Asia.

On a broad view it would seem, that as an approach is made from the western confines of Cochin-China towards the Ganges, the warlike energies of the various intermediate tribes are upon an ascending scale. China, the fosterer in this section of the East of arts and luxuries, owes her safety to her geographical position, rather than to her numbers; for on her western frontier lies CochinChina, the nursery of a less refined yet bolder race, while on her N. E. stretch the islands of Japan, the rugged coasts and mountains of which seem to have stamped still more warlike features on the singular and industrious race they contain, yet curb any disposition they may have to trouble their neighbours.

The native historian of Aurengzebe's conquests aims at impressing his readers with a very high idea of the bravery of the Assamese.

However politically weak, their personal courage is probably still superior to that of the Burmans. The Laos races have occasionally resisted both Burmans and Siamese, and owe their present state of vassalage to both of these powers, but particularly to the Siamcse, to their disunion and paucity of numbers only. It may be remarked that the deficiency which is observable amongst all these nations in order, steady courage, military discipline, and union, is in some measure compensated by the rigour of their laws, their exeessive self-importance, and the implicit faith they almost universally repose in all sorts of talismans, auguries, and invisible influences. These last, it will be confessed, are certain to inspire even timid minds with a confidence which may support them in battle against an equal enemy, and insure victory over any inferior one. The force of such belief has been exemplified not long since in contests with the Ashantees on the Gold Coast.

It may now be worth while to attend shortly to the military condition of the Siamese in former times, as described by several authors.

Loubère held the Siamese military character in great contempt, and fell into the frequent error of rating it by an European standard. Writers also, as before alluded to, on the wars of the Peguans, the Burmans, and Siamese, represented them in a very despicable light. The Siamesc have not been tried as yet, by the British, but werc they to be so, we eannot safely pronounce that their character for war has not been undervalued by travellers of the present day also.

Loubère remained a few months in Siam, and afterwards compled an account from information given to him by Europeans settled there, of whose views and whose sources of knowledge he must have been in a great measure ignorant. At the same time his " Historical Account of Sian" contains much accurate information. He observes, "the sight of a naked sword is sufficient to put an hundred Siamese to flight; there is only required the assured tone of an European who wears a sword by his side or a cane in his hand, to make them forget the most positive orders of their superiors." The next is a sweeping charge, which proves that he judged without reflection or proof. "I say that every one born in the Indies is without couragc, although he be born of European parents." He then, in support of such extravagant assumptions, goes on to statc, that a "Cyprian, a foreigner by birth, who served in the Siamese army, went alone into the enemy's camp and took their general captive!" a story which might have passed in a romantic age, but is too improbable for history. His general eha-
racter of them is more happy, but it equally bclongs to any people who are politically enslaved-"they are proud with those who deal quietly with them, humble to those who treat them with rigour, and subtle and variable like all those who suspect their own weakness."

It is too true that their rulers have no regard for justice, while the governed, having already drained the cup of oppression to the dregs, scek refuge and consolation in a well enough defined social private compact, which is not so tangible to tyranny as their property.

It happened rather unfortunately for Loubère's postulates, that they were proved to have been mere assumptions only one year subsequent to his leaving Siam, and, as generally happens in such cases, the proofs were more glaring, and seemed more discreditable to those in whose persons they were exhibited, in the exact degree that their opposites had been insisted on.

The facts alluded to, and which are perhaps so well known that they might have been here omitted, are rclated by Kempfer in his well-known "History of Japan," and are bricfly these: Constantin Faulkon, a Greek, and who had been a cockswain in the English service, contrived by his ability and his success in the matters assigned to him by the Siamese court, to reach within the space of nine years the pinnacle of credit and authority. He it was who had persuaded the king to send an embassy to France, which produced two in return, the last being M. de la Loubère's. General des Fargues occupied Bankok with 1400 French soldiers; Faulkon now thought he might safely upset the government, and place the reigning king's son-in-law, and a creature of the French and himself, on the throne. The general was invited up to Ayutthiya to witness the ceremony which was to give to his nation the supremacy over Siam. But before his arrival Faulkon had been beheaded, a pretty fair specimen of Siamese promptitude, and mcasures had been taken to prevent the defection from spreading.

The general was glad to escape by leaving his two sons and twelve men as hostages in the hands of the Siamese. Notwithstanding that the latter held such strong pledges for his non-interference in the affairs of the country, he imprudently, and it may be added, with reference to the hostages, inhumanly, committed various acts of hostility against the Siamese. A vessel which he sent to acquaint the French commanders of several Siamese vessels with his situation, was attacked and taken after a desperate fight.

The Siamese then began to construct works to prevent the egress of the general, and eventually he found himsclf and his regiment of

Europeans, albeit they had naked swords in their hands, under the necessity of making certain humiliating concessions imposed on them by the Siamese at the price of his and their freedom.

The French have never in this quarter recovered the blow.
But if Loubère despised and underrated the character and resources of the Siamese, Kempfer ${ }^{1}$ unaccountably struck into the opposite extreme of unmerited and unqualified panegyric, affirming that "the kingdom of Siam is the most powerful, and its court the most magnificent, of all the black nations of Asia." The calm current of truth will as usual be found betwixt the more vehement ripplings on either side of it; yet such an assertion might lead us to suspect some exaggeration in his valuable account of the Japanese.

It would serve no useful purpose were the whole of Loubère's invective to be here noticed and commented on. ${ }^{2}$

The relations which had until within the last four years existed between the British Government and the Court of Siam, may be stated to have been purely commercial, and it was not until the usurpation of the Keddah government by the Phraya of Ligor, by order of the court, that the British found the slight boundary of a river, ${ }^{3}$ one hundred yards broad, alone divided their territory from that under Siamese domination.

The breaking out of the Burman war, which 'promised to bring the British troops into play throughout the whole of Tennasserim, and thereby to place them in contiguity with a long line of Siamese frontier, together with the expedicncy of probing the feelings of the Siamese, and if possible of getting these directed into a channel favourable for the co-operation of the Siamese army with the British one, seem to have induced the Supreme Government to approve of

[^93]certain embassies being sent to Siam. These were subsequent to Mr. Crawfurd's mission, which happened long before the war broke out, and which was of a commercial nature chiefly.

The first, ${ }^{1}$ which was despatched in May, 1824, to the Rájá or Phraya of Ligor, failed entirely in its object, namely, of inducing that chief to afford the assistance of a fleet of boats for the Rangoon expedition. The causes of the failure were simply the late period at which it was sent, after war had actually commenced, the cautious, haughty, and dilatory temper of the Phraya, and his inability to act without direct instructions from the capital. The embassy was, however, detained three months in his country, and some local information was thereby acquired.

The next embassy was despatched from Princc of Wales Island, under Lieutenant-Colonel Snow, of the Madras army, and a second ${ }^{2}$ furnished with duplicate powers, in case such might have been required. Its general object was nearly the same as that of the preceding one, to obtain the co-operation of the Siamese in the war, and in any desirable shape in which their pride, ambition, or avarice might instigate them to act. It was intended that on Tavoy and Mergui falling into the hands of the British, the mission should proceed overland to the capital of Siam, a journey of about twentyfive days.

This embassy which promised, at least, to develope, in the speediest manner localities might be supposed to permit, the sentiments and purposes of the Siamese regarding the war, and to assure them at the same time of the real intent with which that war had been entered on, was arrested at Tavoy by an order conveyed through the political agent in Ava, and was dissolved. The second member of the mission, however, was enabled to penetrate, in conformity with separate instructions, by two several routes, to the Siamese frontier, by which some information respecting these tracts was obtained.

A third speedily followed, under the direction of Captain (now Major) Henry Burney, of the Bengal army, who went to Siam by sea, and of course arrived in the capital at a period when the vacillating court had made up its mind on the points which the two previous embassies had brought before it.

In so far, therefore, as the pugnacious propensities of the Siamese were to be worked on, the mission neither did, nor could, produce any sensible effect in aid of our arms. But a treaty was concluded

[^94]betwixt the Governor-General of India and the Siamese Court. Just before this took place, the infraction by the Siamese Governor of the Lower Provinces of a preliminary treaty entered into by him with the British, was the cause of another embassy being sent from Prince of Wales Island to the Malayan petty state of Perak. It would appear that the Siamese, following up the ambitious policy which had urged them to invade, and annex to their territory the country of our ally, the Rájá of Keddah, had now sent an influential party, backed by armed men, into the Perak statc, and that having here usurped the rájá's authority, they contemplated the extension of their power over the whole remaining parts of the peninsula (not perhaps excluding from their ultimate prospects the province of Malacca). The embassy ${ }^{1}$ proceeded in the H. C. B. cruizer Antelope, and a gun-brig, up the Perak river. The Siamese did not deem themselves strong enough to dispute the passage, but evacuated the country, and protracted negotiations during nearly a month enabled the political agent to destroy the Siamese influence in that country, to restore the chief to his rightful state of independence, and to free all those who were interested in the prosperity of the peninsula from their apprehensions of the effects of Siamese aggression, which is always marked by reckless devastation, cruelty, and barbarities of every kind.

But if the Siamese Court veiled the shrine of its political god at Bankok, the steps of the devotees were apparent enough on the frontiers of the Martaban province, nor was it difficult to discern that the Devatta was ambition, and that so long as there remained a prospect of gaining by his instrumentality the envied post of Martaban, it was a matter of indifference to them which party were victorious. The high-flown adulation with which the Siamese generals besprinkled the Commander-in-Chief of the British forces in Ava, was intended as a fence and cover to their paltry shifting, and to procure for them a ready access to the person and opinions of that chicf; and both objects were gained and kept during a period sufficiently long for their purposes.

Any person who will allow humanity, confined by just political views, to guide and aid him in his retrospect, must assuredly rejoice that the British arms did prore alone strong enough for the arduous task assigned them ; at the same time it must be admitted that the nature of the war at its commencement was such as to render, apparently, Siamese co-operation highly desirable, or at the least their neutrality.

[^95]Before the British entered into the contest with Ava, the Siamese and the Burmans were constantly at war.

Where enemies come to a mutual understanding to confront each other as rarely as possible, the arts of stockading, mining, and trenching, are of primary importance. We accordingly find that both the Siamese and Burmans are well advanced in these arts, considering their state of civilization.

The Siamese are, indecd, so attached to these modes of carrying on a war, that several of their most celebrated historical romances hinge entirely on them. In the work termed Mahosat, the Siamese lcaning to defensive warfare is particularly obvious. It is probable that this work has reference to some system of more westerly origin, since many of the incidents it records have seemingly been taken from the Thotsa Chatta, or Bali chronology of the ten Avatar princes, in whom the Siamese Buddha became successively incarnate. ${ }^{1}$

In the Bali work termed Milinda Raja, under the head Aníka, the following order for war is specified:-Hattha Aníka, the elephant column. On each elephant are four armed men; cight armed men follow on foot, being two for each leg of the animal. Four elephants thus attended compose a party, which is commanded by an officer. Next Assa Aníka, a horse and armed rider, cight foot soldiers attend him, and all these with their attendants form a squad, or band. Rattha Aníka, a war-chariot with one inside rider, dragged by horses which are driven by a soldier sitting in front of the charioteer; two soldiers run along with each wheel, and four chariots are a band. Patí Aníka, a foot soldier ; four compose a party, and four parties, or sixteen men, are a band, who are under an officer.

The Siamese can scarcely be said to have any well-fortificd places; those at Bankok, the capital, and at the mouth of the Menam river leading to it, have been often described, and it may safely be affirmed with respect to them, that they would prove but feeble obstacles to an attack on the city by one or two well-manned European ships of war. Their very best defences would little avail them, even at a distance from the river, if spiritedly attacked by infantry and some small guns.

The true Siamese, and, indeed, Indo-Chinese fort, is the stockade, and it is believed that this race produccs as expert stockaders as the

[^96]Burman nation does. They have been rivals in the art ever since they contended for supremacy.

There are, however, several brick fortifications or walls, and walled towns, in different parts of Siam and in the neighbouring countries of Laos and Camboja. These defences may be of service here, since the natives have little knowledge of the methods of breaching a place, but would prove stumbling-blocks in their way had they cver to contend with practised troops. Their walls are for the most part of a square or oblong shape, with round or square demibastions at intervals, and have sometimes double ditches outside.

## Mode of Attack.

The Siamese rarely attack a fortified place until they have blockaded it to the utmost of their means. They then make approaches by trenching and throwing an occasional shot, rocket, or combustible ball, into the enemy's work. If they find the enemy to waver, they spring a mine perhaps, or try to surprise them. An open attack is rarely persisted in, if any determined opposition is shown. Their chief aim is to outflank an enemy.

## Fire Armis.

The Siamese, inferior as they are to the Chinese in the arts of civilized life, have yet the advantage of them in the use of fire-arms. They are also a muscular people, although the average of their stature is only about 5 feet 4 inches at the highest; Mr. Crawfurd gives it at 5 feet 3 inches. This last is the average of the people of Lower Siam under the Ligorean, as measured by me:

| Ft. 1n. | Ft. In. |
| :---: | :---: |
| 1st Man...................... 53 | 5th Man .................... 56 |
| 2nd........................... 54 | 6th ........................... 5 4 4 |
| 3rd ......................... 5 49 | 7th.......................... 50 |
| 4th........................... 55 | 8th |

This observation is made from a comparison of what has been seen by me amongst the Siamese, and what has been written respecting the Chinese by natives of China and by Europeans. The Siamese do not despise the arts of foreigners, and have had the good sense to avail themselves of them in their war department.

The indigenous population of the whole of Siam (i.e., exclusive of Chinese and other foreigners) may be rated at $1,700,000$ souls as a maximum. But I will here take it at $1,500,000$ souls. The male Chinese amount, it is said, to 205,000 at least.

In this number of Siamcse, all the males not specially exempted,
betwixt the ages of fifteen and sixty years on urgent occasions, and between twenty-one and sixty in ordinary times, bear the king's seal impressed on their arms, a little above the wrist; no male subject can escape the infliction of this mark of servitude unless he be a priest ${ }^{1}$ or public servant; or unless by his either purchasing his exemption, or securing it by taking shelter under some man of rank or office. Of the first class the numbers are few ; of the latter there is a considerable body, but its real amount it would be very difficult to discover; I incline to place it at 10,000 .

Reflecting on this conscriptive system, one might be led to suppose that Siam could bring a very respectable numerical force into the field; but this conclusion ought not to be hastily drawn.

According to the principles usually recognised by writers on population, and allowing one man for each house, there ought to bc in the above rated population of $1,500,000$ souls, a body of 300,000 men perfectly capable of bearing arms, or whose ages lie betwixt twenty and forty-five.

But it has never perhaps yet happened, that the total available male population of any country has assembled en masse, and an inspection of the map of Siam will at once show the impracticability of such a congregating there.

The total want of anything like attachment to the government in its people, the dispersed state of the provinces, the difficulty of collecting and supplying with provisions troops scattered over so wide a surface, and the inability of the government efficiently to arm the whole, must all operate against the rapid accumulation of a large army, while they would render speedy the dissolution of a moderate one. That Siam labours under a paucity of inhabitants compared with the extent of her soil, is proved sufficiently by the restrictions imposed on the emigration of her pcople, particularly women. The Chinese Government, it may be said, imposes similar restrictions on its subjects; but its bigotry to everything ancient urges it to continue the restriction after the cause in which it originated has totally disappeared, namely, a redundant population.

There is a vast difference betwixt a forcc thus assembled for defensive purposes, and one destined for foreign service.

Although Upper Siam might afford a levy en masse of 100,000 men, and the lower provinces on each side of the Gulf 20,000 each,

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yet it appears extremely doubtful if the Court of Bankok could assemble an army of 20,000 perfectly efficient and well-armed Siamese for aggressive purposes on its neighbours; it might, perhaps, get together 50,000 men of every description. During the Burman war with the British, the Siamese had a mercenary force of, it was said, 10,000 men, chiefly composed of Peguans. When Siam was last attacked in the quarter of Salang, or Junkceylon (which happened about 1810), by a Burman army of 35,000 men (according to the Siamese), a force was despatched from Bankok, which joined another under the Rajá of Ligor, and then a third under the Bindakara of Keddah, who became the Laksamana, or general-inchief. This combined army consisted of 27,000 troops, agreeably to information which was given to me by a Siamese priest who accompanied the Bankok force; and by other natives who witnessed the progress of the war. The Burmans had been, it seems, three months in possession before they were driven out.

Of this force 3000 Siamese were left to garrison a town on the west coast of the Gulf of Siam.

The rcsult is wcll known; the Burmans were signally defcated, and driven back with the loss of the greatest part of their army.

The Bankok force had, according to the same authorities, 1000 swivels, some on elephants, and about onc-third of the men had muskets.

The following order was observed during the march :-

1. The advanced guard, called Súa pa, "tigers of the woods," and méo san, "watchful cats," bcing in all 300 men. The advance sometimes preceded the main body by several days when the enemy was at a distance.
2. The main body, preceded by artillery.
3. The "Pík Khwa," right wing.
4. The "Pík Sai," left wing.

The commander-in-chief's body guard consisted of 300 men clothed in red cloth, with muskets and swords; 300 men dressed in blue cloth, with swords and muskets.

Every party of ten men had a servant, who brought provisions from the baggage.

A gun was fired at an carly hour. The army having marched until about eight o'clock halted for breakfast, then having proceeded till mid-day, made a second halt. Two hours after this it again sct out, and halted for the night at about four or five o'clock p.m.

The day's march was averaged at 800 sens, about twenty miles.
During the night fires were lighted around the camp, and patrols
and sentries arranged, and no intercourse was permitted betwixt different parts of the camp on pain of death.

The army had no cover but what the forcst and their clothes afforded.

The night was divided into four watches, and at the relief of each the gong was beaten.

The materiel was conveyed on elephants, and in chests and bags.
Siam seemed oncc aware of the bad policy of keeping mercenary troops; for the Japanese guards were disbanded. Why the Peguans are now preferred it were hard to say, unless they are found more submissive and tractable.

The Chinese are never employed as troops; were they, indeed, of a warlike disposition, Siam might have good reason to dread them.

## WEAPONS.

The armoury at Bankok is by all accounts well filled, and from what has been personally observed by me amongst the Ligorian's troops, it should seem that they are better armed than even the Burmans are. There are several reasons for this; the port of Bankok is open to ships from every nation, and good prices are paid for the muskets they bring; and the towns are well supplied with Chinese blacksmiths, who not only repair but manufacture arms.

Lead is not, perhaps, so plentifully got in Siam as it is in Ava. It does not appear from any accounts we possess that lead is found in Lower Siam; it exists sparingly in the central parts, and, according to Mr. Crawfurd, more plentifully on the northern frontier, where 2000 peculs are annually obtained. In Ava, and especially in the frontier Shán province of Thaumpé, extensive mines of it are worked. Instead of lead the Siamesc frequently employ tin for musket-balls, or a mixture of it and lead.

## GUNPOWDER.

Their powder is either imported or manufactured in the country. What they make has a very coarse grain, like Burman powder, and is deficient in strength. The sulphur is generally imported, although it might be got perhaps in the country.

The saltpetre is chiefly made from the lixiviate formed by saturating the dung of bats or vampires in water and evaporating. This is found in large quantities in the caves which abound in the hilly districts, especially in Ligor and Dalung. In a cave under the singular rock called Sagat láng, which forms the west side of the Kru
kla rapid on the Martaban or San Luen river, the soil of bats was found by me to be a foot dcep at the least.

The charcoal used in making the powder is carcfully preparcd from two kinds of woods, the Pankare, which is light, and the Wai mai thán, a species of cane, the fibre of which only is uscd.

The ingredients having been well pounded and mixed, are formed into a mass with the help of water and the juice of the Khá (or Maranta galanga of Linn.), or of the Alpinia galanga. The mixture is put over a fire, and when the evaporation has proceeded nearly to dryness, the residuum is exposed to the sun and well dried. It is then pounded and spread out on mats, and a grain is formed by sprinkling a diluted ardent spirit over it. The gunpowder is preserved in large earthen glazed China jars, well closed by wooden covers, and lined with clay.

Their cannon-balls are of iron, but stone, and even wooden oncs, are used occasionally.

## POLICY OF ALLOWING THE SIAMESE AND OTHER INDO-CHINESE TO PURCHASE FIRE-ARMS AT BRITISH PORTS.

It has been questioned whether it consists with British policy that the Siamese and other people should be permitted to supply themselves with fire-arms from the ports in the Straits of Malacca.

Were the Siamese on a footing in point of courage with nations more civilized and better inured to war, it might be easily shown that they would bestill, with this permission, much more formidable with their national weapons in their hands, than if they should employ, as they now do, the musket without the bayonet attached, in the way the Burmans use it. But as the Siamese, Burmans, and other Indo-Chinese nations, fall greatly below the European standard in discipline and valour, it is quite obvious that without fire-arms they must prove weak and puny adversaries when opposed to European skill and couragc.

Their national arms they could not use with any degree of effect, since it is plain that they never would come to close quarters with cnemies so superior. On the other hand it is equally clear, and has indeed been confirmed by the experience of the Burman war, that the adoption of the musket must give to these nations in time of war, and in peculiar situations, a manifest degree of superiority over Europeans. While the former are fighting defensively, every step in advance upon them is gained with the loss of men. When they lie behind a rampart or in a trench, that superiority will be measured by the time required to reach them, and that time will gene-
rally be sufficient to render cach advantage a dearly bought onc. But should it be on such grounds politic to interdict the sale of firearms to these nations, the prohibition would be in a measure futile, since American and other ships will always be ready to supply their wants. It is true that the Siamese prefer English muskets to those of other nations, but they will be glad to take any kind if such are debarred them.

The question, then, will be, whether, for the sake of opening this source of trade to our merchants, we may safcly run the risk of adding to the confidence and strength of the people just alluded to, by affording them more destructive arms than they can procure elsewhere.

The Siamese national arms are the sword, spear, and bow.
They have adopted the following:

1. Pun yai, or cannon.

Each gun has from twenty to forty men attached to it, to drag and work it.
2. Charong; field-pieces, with twenty men attached.
3. Pun láng cháang; a swivel which is carried on an clephant. :
4. Pun khá nok yang, is a short piece which onc or two mon can carry. When it is to be fircd, it is supported on a sort of tripod of wood. It is either a wall or a field-piecc, and is of the same description as that which the Burmans used with such good effect during thcir war with the British. This arm is capable of improvement, and from its portable nature might be rendered very serviceable in the hands of British soldiers obliged to fight in jungles.

Pun Sak chai,
Punnok Khúm; "quail's-bill piece," are small picces of ordnance.
The Háám Len is a wall-piece, and is also used like the pun khá nok yang in the field.

Pun K'hap síula are the infantry muskets. The powder is kept in joints of bamboo or in horns, and the balls in bags tied round the waist; the bags have a top of horn. Mr. Crawfurd, in his "Mission to Siam," observes, that the Siamese got about 30,000 stand of arms from the Americans.

The large gunpowder bamboo is slung over the right shoulder, but the belt does not cross the body. They also carry small bamboos filled with combustible matter to set villages on fire.

Khap chút is a matchlock, the match being fixed in the place which the flint would otherwise occupy.

Pun langmáa, the pistol.

Kháng praí is a blunderbuss. This arm is fabricated in Siam and in the Straits of Malacca by the Chinese. The outside of the barrel looks well, but the inner surface is very rough. They have also large brass pieees, mortar-shaped, for throwing grape to short distances.

Thanú, the eross-bow, is about five feet long; it is passed through a stock about threc or four feet long, tipped with hard wood, or iron. The leaf of a palm supplies the place of a feather to the arrow. The bow-string is drawn to the noteh by the united cxertion of the feet and arms, and the arrow is shot off by a trigger. These last arc often poisoned by the tribes who oceupy the wilder parts of the country, and who, it may be remarked, alone use the bow and arrow in battle.

The poison is the 1 lipoh, or upas of the Malays, or toxicaria of Marsden. The tree whieh yields it has no pceuliar noxious influence on those who shelter under it, as was formerly believed. It grows plentifully in the peninsula of Malacea, and its juice, prepared by boiling, is employed by most of the savage tribes of the forcst to poison their arrows. The poison to have full effeet must be used fresh. A poisoned arrow proeured by mc from one of these tribes, was, after having been kept several months, found to have no effect on a dog which was wounded by it.

The Kayú rungas of the Malays, a red-wooded tree, is much dreaded by the Malayan wood-cutters. One of them, after having cut down a tree of this description, has been observed by me to be afflieted with painful swellings of the face and body. Sleeping under it is hurtful.

Hák sat is a spear about seven feet long, and is east by the foot.
Hák is a plain spear.
K'houm is a sort of lance or javelin, seven or eight feet long, sometimes longer. It is seized at the upper end, the fore-finger resting on the top; and although light, flies with sufficient force for thirty to forty yards to kill an enemy. The Burmans used the same weapon in the last war, but the British troops were too rapid in their attaeks to suffer much from them.

Trí is a trident-shaped missile.
Dap is the long eurved sword, from eighteen to forty inehes long; a dart is lodged on each side of it to cast at an enemy before coming to close quarters. Some of these swords require both hands to wield them.

Kapi is a long sabre, and has been got from foreigners.
Ngao is a sort of curved knife or sword, of eighteen inches long, having a handle of about six feet in length.

Kasún is the common single bow.
Lok faí, "ehild of fire," is a eombustible ball, which is thrown from a gun to set fire to a town. It is not dangerous in any other point of view, as it does not explode.

Phlo is a small fire-ball, which is sent out of a bamboo, on the principle of a rocket, for signals.

Tro-ut is the Siamese rocket.
The Siamese seem to be inferior to the Burmans, as these last are to the Chinese, in the knowledge of pyrotechny. The Burmans made little or no use of their boasted rockets during the late war; but Congreve's gave them a lesson. The Siamese use firc-rafts on their rivers when attacked, and they stoekade these also as far as they can. In 1825 they pretended to be, or really were, so apprehensive of a visit from the British troops, that they attempted to throw a ehain across the river Ménam to prevent ships from reaching the capital. This attempt, which would have been useless before any European enemy, was not carried on.

Lo is a round shield.
Dang, an oblong one; they are either formcd of wood or of buffalo's hide.

Khwak kachap sínngaam, are crows' feet, made of bamboo sharpened, and then hardened by fire, or of iron, and so construeted that on being cast on the ground one spike remains ncarly upright. These are carried in bags, and during a retreat are strewed in the path and amongst grass to impede pursuit.

They also, like the Burmans and Malays, use spikes of bamboo similarly prepared, from six inches long and upwards, for the same purpose, and also as a defence to a town or stockade. These are generally eoneealed in grass and weeds, and inflict very bad wounds, penetrating even the thick sole of a leather shoe, as many soldiers who fought in the Ava campaign can testify.

The Siamese have knives and daggers, but do not often use them, unless to despatch a prisoner where quarter is refused.

The Siamese mining and trenching implements differ a little from those of the Burmans; eaeh soldier is provided with a set when they are likely to be required. Every man takes care of himself when a trench is to be made, but a general line is preserved, and in an hour's time a Siamese army can be put completely out of sight and beyond the chance of injury from musketry and cannon.

Even mortar practice must be very correct to tell on them with effect when so situated.

## ORGANIZATION OF AN ARMY.

The organization of a Siamese army and its accessorics comc next to be considered.

Some account of these has been given in the description of the army which marched from Bankok to drive out the Burmans from Junkceylon. But a more general account may be required by the curious on such subjects.

A Siamese force having been assembled by the usual means of a forced conscription, and the sccuring of the relatives of conscripts as pledges for thicir fidelity, it is divided into three lines, each consisting of three divisions. The first line consists of the Naa, or (advanced) centre; the Pík khwa, or right wing; and Pík sai, the left wing. The Nún, or second line, is also similarly divided, as is the Lang, or third line, which forms the reserve.

The Commander-in-Chief is chosen from amongst the great officers of the state, without any minute inquiry as to his capacity for the office.

As bravery is not herc the over-frequent growth of the soil, the Court perhaps judges rightly in often preferring the greatest boaster for this high office, since he thereby lays himself by his voluntary pledge more open to punishment for misconduct. Inordinate pretension, too, suits the genius of this Court.

The Commander-in-Chief is generally a Phraya, or officer of the first class. He is compelled to take a binding oath, whieh will be found at the end of this chapter. The officers next in rank to him are taken up from the Lo-ang. They arc commonly six in number:

1. Lo-aug Phí Chai Sena.
2. Lo-ang Awút.
3. Lo-ang Satha ru-ang det.
4. Lo-ang Wíset Kra sattra.
5. Lo-ang Soug Rícha.
6. Lo-ang Kla P'honlarop.

These six take the oath.
Next are the Mun, who command each 200 men. They are selected from the class so called, and they are required to take the oath. The Phan command small parties, and being of iuferior rank they do not take an oath. But, as in civil offices, the following order of rank may be also followed :-

1. Chaau Phraya.
2. Phraya.
3. Phra.
4. Lo-ang.
5. Khún.
6. Phan.
7. Nai.
8. Phrai, or common soldiers.

The exelusive military titles given to the chiefs in command are :

| 1st. Khun Phon | Commander-in-Cl |
| :---: | :---: |
| 2nd. P'hayakk'ha Naam | Tiger General. |
| 3rd. Síng'ha Naam | Lion General. |
| 4th. Nagha Naam | Snake General. |
| 5th. Khrúttha Naam | Garuda General. |
| 6 th. Khoteha Naam | Lion General. |
| (There are four kinds of Lions) |  |
| 7 th. Sunnakk'ha Naam | Dog Gener |

The last title may serve to remind us of the Canicularians of Curdistan, and in Libanus, and of the frequent worship of the dog in former ages.

To illustrate more fully the institutions of this eurious people, I have translated from a Siamese manuscript the deseription of the thirteen different military dispositions praetised by them. That these are ever very closely followed, or that the numbers of the troops given correspond with faets, cannot be proved, and need not be supposed. It is probable that the system may have in some measure been suggested to them by persons versed in the Bali language. There is one reason for my thus showing these fanciful evolutions, and it deserves notiee. It is this, that throughout the whole of them there is not one single allusion to naval warfare; the faet is singular, since, although the Siamese are not much attaehed to a seafaring life, yet their maritime situation has often compelled them to contend with their enemies on the sea, and it suffieiently points out their origin to have been far removed to the northward of the Indian Oeean. A Siamese Phra Chaukhú, or priest, informed me that they have a Bali work relating to warfare, termed Chattu Rongkha.

A Siamese general rarely exposes his person; he occupies a position in the rear of the centre line with his body-guard and band of musie. He wears the mo-ak, or high and peaked gilt eap.

## DRESS.

The Siamese national military dress is red, but the government is too penurious, and too little impressed with a knowledge of the advantages derived from uniformity, to give its troops respectable clothing. It is only a select body which is honoured with a red or blue uniform. It follows that a Siamese army, like a Burman one, cxhibits a motley assemblage of fanciful dresses, and of persons naked from the waist upwards. The Siamese prefer this last state, for they are scldom seen with the upper part of the body clotled except in cool weather. The rájá or governor of Ligor himself sits in the Salaa or Durbar, without being clothed higher than just described. The true national head-dress is a crop; the hair is longer in front than behind, and is brushed up in a way which gives them a wild appcarance. It is the best mode of wearing the hair for war, cspecially in a retrcat, for the Chinese and others who wear their hair long are liable to be caught more easily by an enemy.

Fighting men have generally a peculiarly shaped cap or turban, stamped with cabalistical sentences from the sacred Bali. All ranks are attached to charms, which they bclieve perfectly secure them against wounds. Such a charm may consist of a deer's horn, a precious stone, a bit of wood, a gold ring, or other things over which incantations have been repeated, by pricsts or other persons qualified for the purpose.

The Siamese are acquainted with the use of coats of mail, but, unless on some grand attack of a fortified place, they do not attach importance to their use. Besides, as mail is of little or no service to foot soldiers, and the Siamese have no cavalry, ${ }^{1}$ the use of it must be confined to the men on elephants.

## STATE OF DISCIPLINE.-EFFICIENCX,-SUPPLIES.

As the Siamese have no body of indigenous troops deserving the name of a standing army, that discipline which alone renders men formidable in the field is with them at a very low ebb. Whatever degrec of expertness a Siamese soldier may exhibit in the use of his arms, is generally the result of his own exertions, for he reccives no training, (although he may have just left his plough,) until he goes into action. In their villages and in their houses they practise the ram dap, or sword dance, much in the Burman manner, and have fcncing matches (pang pat). In these last the left hand is

[^98]armed either with a shield or a sword; the sword held in the left hand is for defence, the other for attaek. Some of their positions are good, but they transgress the rules of science by striking so low as to expose the upper half of their bodies to an adversary. The long shield covers the body from the head to the knee, and is worn to ward off a eut on the left side. The Siamese will never thrust at a shield, since they are framed often of tough buffalo or rhinoceros hide, in which a sword would stick.

They seldom fire in a standing position, but in one somewhat approaching to that used by European sharpshooters; and their whole musket exereise consists in loading and firing in the manncr eaeh individual finds most convenient for himself.

They are, however, pretty good marksmen; they praetise at a mark about the size of a erown-piece, and at a proper distance.

Siamese troops generally appeared to me to have a slovenly stooping gait, which may in part be owing to the habit of eonstantly crouching to power in every shape. The Siamese do not use oil and unguents like the natives of India to render their limbs supple, but they are an aetive race when in the field, and eapable of enduring mueh fatigue.

## PAY, RATIONS, AND SUPPLIES.

The soldier does not receive regular pay at any time, and in general does not get any pay or remuncration exeepting bare provisions. Even these last he seldom reeeives until he has actually joined the army. In a book of rules it is provided that each man shall have a vest, a handkerchief for the head, and a sum of about ten rupees. The ehiefs ought to have gold broeade dresses and money, but it is doubted if these regulations are aeted on. Provisions or rations eonsist of rice, which having been boiled is dried in the sun ; it is then paeked in long bags, and each soldier, after the Burman fashion, wears one round his body until its contents are expended, also salt dried fish, chillies, and other small supplies. Every soldier on a regular march earries as many days' provisions as he ean, and a bamboo of water; he is afterwards supplied from the stores eonveyed on elephants; one man is allowed to every ten to assist them in cooking, bringing provisions, \&e. As no Siamese foree is aeeompanied by sueh a large number of elephants as would be required to eonvey provisions for any eonsiderable length of time, the government always takes care to form depôts of grain at all the most important stations in the country; and it is, as amongst the Burmans, a rule, never swerved from it is believed, that every
province in the kingdom, and every subject state, shall provide grain to meet contingencies. For this purpose a tithe of the crop is yearly storcd up in granaries.

The king takes the richest plunder of a campaign, but private plunder is also permitted.

## CAMPAIGNS.-SLAVERY.

The Siamcse make it a rule never to give quarter in battle, unless to officers of high rank. Prisoners taken after an engagement are carricd into slavery. The sole object in the predatory incursions formerly made by the Siamcse and Burmans into the outer provinces of cach other's countries, was to carry off the inhabitants and convert them into slaves. The Burmans got back many of their countrymen at the intercession of the British authorities, but the Siamese are too politic a nation to allow a treaty to shackle them, except where the obligation is calculated to operate in their favour. They have accordingly helped themselves out of the unfortunate country of Keddah to a supply of persons of both sexes, and of all ages, excepting the infirm, in order to fill up the void space lcft by the removal of the Burmans and Peguans, taking credit all the while for having lent a favourable ear to the solicitations of the British.

## MARCHES.—OMENS.

The marchcs of a Siamese army are regulated by thic ma-hon, or astrologers, who form a numerous class, depending for subsistence on the offerings of credulity. If a snake should cross the road from right to left, it is a bad omen ; if the reverse, it is good. But these astrologers have regular tables by which they calculate their fortunate days, and some of which depend on the peculiar positions of the planets. A preparation over a fire with shoots of the wild lime, and the wood of the tree called dudor by Malays, is fired along with ball at an enemy, and is supposed to paralyze his efforts. When going into battle, the Siamese often tie the long handles of their swords to the fore-arm, and repcat backwards the following Bali passage :-"Eítí píso Bakhawa arahang Samasam Phúttho wícha charana sam paunosúkkhato lokawíthú anúttaro búrítsa thammassa rathí satha thewa manúts-anang Phúttho Bhakkhawatí."

It would be difficult to state the number of elephants which accompanies any given number of men. It depends entirely on the nature of the scrvice to be performed. To each elephant are allotted twenty men, one sits on the neck, two in or on the howdah, who direct a swivel. To each foot of the animal there are four men
appointed, and they carry such arms as are given to them. Female elephants are mixed with the males to keep them in subjection. The elephants of Siam are large and well-trained. Lower Siam and the peninsula of Malacca abound with fine ones. The people from the Coromandel coast frequently export them; they take them on board at a port within the Mon. Company's territory, on the bank of the Pry river, lying opposite to Penang.

In marching, the centre of each line is some distance in advance of the wings, but not so far as to prevent them mutually assisting. The first line often precedes the others by two or three days' march. If the line thus advanced sustains a defeat, the rear oncs generally retreat. About the period when Junkceylon was rctaken, a Siamese force invaded Tavoy; it consisted, according to the Siamese, of $10,000 \mathrm{men}$. The advance of about 3000 having been beaten, the general fled or returned. At this rate we should only reckon in an army of 100,000 men, 33,000 who could be depended on.

They march at any hour, as the case may be, setting out before sun-rise; they halt an loour or two for breakfast, resume the march till about mid-day, then halt for rest, and finish the day's march about 4 p.m. They kecp regular watches at night, and post numerous sentries, so that the Indo-Chinese armies are not so liable as Indian oncs to be surprised at night. Fires are kept burning all round the camp, and patrols, when an enemy is near, are sent in cvery direction. A day's march is about twenty miles on an average.

The van of an army is preceded, and in some degree screened from the brunt of the onset, by a sort of forlorn hope, consisting of gaol prisoners and persons in disgrace with thcir superiors or the Court, and who have all the promise of pardon should they behave well and survive. This body are not denied such artificial or natural defences as they can make or find, such as bags of sand, rocks and banks, \&c. The head-quarters are in the centre, as before observed.

When the troops reach within musket range of the enemy, the ranks are single and about twenty feet asunder. They alternately advance, stoop and fire, taking advantage the while of every natural shelter the place may afford. When they attack a fortified place they first endeavour to completcly invest it ; their guns fire occasionally, the miners and working parties keep constantly digging approaches, and when they have got close to the enemy they perhaps try to cxplode a mine, or, if they fancy him to be alarmed and ready to fly, they venture an escalade.

## SIEGES.

The siege of the Laos fortified town of Che-ung-mai, about twenty-eight years ago, lasted, the natives say, nearly two years, when it was relicved by the arrival of a Siamese force. If they have no time to dig trenches, cach man bearing a musket is provided with a spearman, and one or more persons carrying sand-bags, or temporary defences of plank.

## INFLUENCE OF BUDDHISM.

The most singular feature in the Siamese military system is the injunction given to the commanders and soldiers "not to kill," but to fire short of the enemy, that they may escape the denunciation pronounced by their great religious lawgiver, Buddha, against the shedders of blood human and bestial. ${ }^{1}$

With this jesuitical salvo for his conscience, the king of Siam dismisses his generals to the war, knowing full well, however, that the dread of his displeasure, should they prove unsuccessful, will be sufficient to impel them to try and assure themselves of his approbation, by disobeying his orders. The fact is, that the remote dread which the Siamese soldicr feels at the prospect of naraka, or hell, is conquered by the stronger fear of being slain by the enemy before his eyes, and he therefore kills him if he can. To suppose that a Siamese soldier, barbarous and unsparing as he is when excitcd by revenge and hatred, should calmly fire short of, or above, his enemy, were to give him credit for a degree of courage and magnanimity at variance with every fact yet brought to light.

It is true that the benign tenets of genuine Buddhism might have been expected to have operated as powerful checks on the sanguinary dispositions of its later followers, and that the countenance it is calculated to afford to the peaceful arts of life, might have enhanced their value, and insured their ultimate triumph. But none of these results have followed its introduction amongst the Indo-Chinese nations in the degree proportionate to what they ought to have shown themselves. Buddhism would appear to have reached the Siamese at the period when they had but lately branched off from the Lau or Laos nation; and when they possessed all the keen curiosity, the dread of preternatural influences, and sensitiveness to external impressions, joined to the gloomy implacability,

[^99]which are the characteristics of barbarism. Buddhism, therefore, grappled with their senses and fixed their fears; but, divested of its cxternal attractions, it was too abstracted and exclusive to operatc as the complete subverter of former principles of action or the framer of new.

The very naraka or hell, which the Burmans and Siamese dread or feign to dread so much, has only furnished them with demoniac cruelties and tortures to inflict on their enemics or others. Extremes too closely approach each other; and if a high statc of civilization in Europe be consistent or coexistent with the infliction of torture, well may the Indo-Chinese nations claim exemption from severe censure on this head for centuries to come.

## DESERTERS.-MILITARY PUNISHMENTS.

Should a Siamese soldier attempt to desert, he is instantly cut down or reserved for a worse punishment, and his whole family are thereby exposed to the penalty of death for his offence. Decapitation is the most common mode of executing culprits, but the will of the court, or of the commander in the field, determines the nature of the infliction. Somctimes they split open the offender's stomach with a large knife, in the same way as Mrs. Judson has described the Burman punishment, or they scw up his mouth so that he is only able to subsist on liquids, a punishment found amongst the Malays of Keddah.

Other punishments are inhumation up to the neck, and exposure to the sun in this horrid sand-bath for a specific period, or until death ensues ; melted lead or other metal poured down the throat, or a cocoa-nut driven into the mouth. This last punishment is adverted to by M. de la Loubere, in his historical account of Siam. He relates that one of the Siamese ambassadors to the court of France in his time, imprudently said on his return, that the stables of King Louis were more elegant than the impcrial prasaat (palace) at Bankok, for which assertion he was executed, by having a cocoa-nut driven into his mouth. There have been instances (but the punishment is not military, and is confined chiefly to the committers of sacrilege) of persons having been roasted to death in iron cages. Impaling, as amongst the Burmans, is not an unfrequent punishment; strangulation and the bastinado are common; thumb-screwing, and violent compression of the temples, drowning in sacks, and casting from rocks, are also practised. Sometimes the unfortunate wrctch has his limbs tied to the bent-down branches of two contiguous trees,
and these are then allowed to rebound, carrying the dissevered members with them. They brand with a hot iron, or scoop out the eyes, or starve to death, or lop off limbs, or scalp, or cast adrift offenders in leaky boats. Ought civilized nations to treat with such a people on an equal footing ?

## ARDENT SPIRITS.

Although the use of ardent spirits is interdicted by the code of Buddha, yet this does not prevent the Siamese soldier from indulging in them when he can. Arraek is given also to elephants before an engagement. Opium, although prohibited to be used in Siam under sevcre penalties, is nevertheless indulged in.

## TRACES OF HUMAN SACRIFICES HAVING ONCE OBTAINED.

Some faint traces appear to be still extant in Siam, of that nefarious spirit whieh formed the basis of most of the religions or superstitions of the old world, as it yet does of the dark ereeds of several barbarous nations, and which demands the immolation of human victims at the shrine of the deity. But that such saerifices actually formed a part of Siamese superstitions previous to the introduction of Buddhism, eannot perhaps be now proved.

Their soldiers of the present day confess that it is their custom to taste or toueh with their mouths the blood on a sword which has just been used in slaying an enemy, by whieh aet they deelare that they believe themselves to be invested with the courage of the person slain, and that they will be preserved from the maliee of hobgoblins and from madness. This custom is parallel with one which prevails or prevailed amongst several of the savage races of Ameriea, where the heart of an encmy was devoured in order that the person banquetting thus horribly might be inspired with his courage.

## STANDARDS, OR THONG AND STANDARD BEARER.

The Siamese have five prineipal Thong-rap or standards, those of the centre and wings, of the advance, and the rear-guard. They are generally made of silk, and their colour is red. The deviees are often embroidered.

The standard or eolour-maker is either a ehaukù (or priest), or one of the laity of reputed sanetity, But priests only aeeompany the army to perform their proper duties; they are then termed mahon. Siam contains, it is believed, about 50,000 priests. In both cases the individual must undergo certain modes of purification to
propitiate the Devattas. The ceremonies consist in placing lighted waxen tapers, dressed food, confections, and fruits, on the floor, and in ablutions and recitations of Bali passages of celebrated efficacy.

The K'hon-thu-thong, or standard-bearers, are men of some consideration, but not necessarily of very superior rank. They ought to be of a pure mind, and their external man ought to be secured from wounds by potent amulets and charms. These have partly been already noticed. They do not, in the manner of Burmans, tattoo charms on their bodies, or thrust plates of gold or silver impressed with cabalistic marks under the epidermis, but they use charmed juices of trees and oils, termed waan, which are either swallowed or rubbed on different parts of the body, during which operations they repeat invocations. Slips of metal, termed watrut phítsamáan, containing powerful spells, according to their belief, are also hung round the neck, and mongkon, or slips of paper, or o cloth, with other spells written upon them, are worn on the head They also wear charmed clothes, on which Bali sentences have been impressed.

When a Siamese soldier is momentarily expecting to be engaged with the enemy, he makes for the time being a compact with himsclf, by which he renounces his most besctting sins until a certain pcriod shall have elapsed. But they rarely renounce the indulgence of ardent spirits, and therefore pray to the Devattas to forgive them, on the score that such a stimulus is requisite.

The Siamese, like the Burmans, often plant their standards in exposed situations, and surrounded by mock figures, in order to attract and distract the attention and the fire of the encmy. While this stratagem prevails, which it is apt to do in the absence of telescopes, they are busied intrenching themselves, or carrying on some other operation.

## DEVICES ON STANDARDS.

The heraldry of Europe has evidently derived its origin from the East; it was, like that of the latter, intimately associated with religion and superstition. Maurice observes, that by the same hardy race, the descendants of the Tartar tribes which tenanted the north of Asia, armorial bearings were introduced into Europe, which were originally nothing more than hieroglyphical symbols, mostly of a religious allusion, that distinguished the banners of the potentates of Asia. The eagle belongs to the ensign of Vishnu; the bull to that of Siva, and the falcon to that of Rama. The sun rising behind a recumbent hion, blazed on the ancient ensign of the Tartar, and the
eagle of the sun on that of the Persians. The hansa, or famous goose, ${ }^{1}$ one of the minor inearnations of Buddha, is yet the chief emblem on Burman banners. The Russians, no doubt, had their standard from the castern nations; it is the type of Garuda. The Islamites took the crescent, a fit emblem either of a rising or of a deelining empire, and of their primeval worship. Garuda, who is a great favourite with the Siamese, is yet not represented on their ensigns, although he waved his sable wings of old over the war-flag of the Hindu Vasu Deva, and of Pún deríke in Kashe; and although he is otherwise the cagle of the preserving Vishnu, the great enemy of snakes, whose prince, Raja Naga, lives in the nether regions in Badan. ${ }^{2}$ But here in his stead we find the ape general, who was an emblem on the war-flag of Arjún. The leng, or horned alligator, or Sanskrit makara, the type of capricorn, sprawls on the Chinesc standard; the great dragon or snake, symbolieal of the horizon, of the Cncph, or agatho dæmon, or good spirit of the Egyptians, and one of the forms in which Buddha became incarnate, rolls his huge volume on the Malayan flag.

## THE OATII TAKEN BY OFFICERS OF THE GOVERNMENT APPOINTED

TO TIE WAR DEPARTMENT, OR AS COMMANDERS OF TROOPS.
Previous to the oath being administered, a large jar filled with nam ongkhan, or holy water, is placed before the person swearing; five wax eandles are lighted, lignum aloes and other fragrant woods are burned, and five branches of lotus and other flowers, and also perfumes, are duly arranged.

The Sathak'hom, or person who holds the office of adjurator, aceompanied by four Phraam, or Brahmans, attends. Martial weapons which have been dipped in the holy or consecrated water already alluded to, are also produced. The individual makes three several obeisanees to the eandles and flowers, and repeats the Bali crecd, beginning, "Namo thatsa," \&c., and then the invocation of spirits of earth and air, beginning thus: "Sakhe kame charupe," \&e. He then repeats the oath after the Sathak'hom. It is as nearly as possible in the same terms as the judieial oath, a copy of which was transmitted by me to the Royal Asiatic Society, appended to a dissertation on Siamesc law.
"I, his Majesty's devoted slave, placing the sublime feet on the crown of my head, viz., on the head of the slave of the exalted

[^100]Phra Thínang chakkra phat ítsara ai sawan, who governs with justice and according to pure Bali ordinances, who is defender of the pure and holy P'hra Satsana [or the Buddhist faith], who regulates his public conduct by the Institutes of the renowned Barommakrasat of old, whose fame is bright and unsullied as the diamond orb of day, and whose actions are the refulgent beams by which a dark world was illumed, and under whose beneficent rule the arts of peace were cultivated, and science flourished. I, slave of Phra Phút thí chau [here one of the titles of Buddha is obliquely bestowed on the king], solicit that I may be here permitted to take the binding oath of allegiance to his sacred majesty, the sappha awut thang po-ang, or arms and panoply of war; and the holy water being before me, and further, being conscious that I act as if in the presence of Phra Phút thí chau [Buddha], of Phra Dhamachau [the Bali or sacred word, here in a manner personified], and also of Phra Songkha chau [the holy ministers of religion]; and likewise in the presence of the emerald image of Buddha, which was fashioned by the hands of the cloud-borne Indra, when he condescended to visit the earth; and also having before me, and deeply impressed on my mind, the fear of the Devattas, and a sense of their glorious presence, and that they see me and hear me; in presence also of the spirits both good and evil of the four several degrees, and of Krung Phalí, who was driven from the earth by Buddha; of Nang Phra Tháraní, the goddess of earth; of Uma Bhakk'hawadi, the Rak'hsa princess, who is everywhere present; of Wíchathán, the famed physician of old, who discovered the mercurial elixir, conferring immortality, and found out the virginbearing tree; ${ }^{1}$ also of Khún thán, and of Subanna and Nagha Raja; in presence of this exalted assemblage of divinities and spirits of distinguished mortals, I do swear that I will neither think, speak or act, in any way which shall not prove my fidelity to his Majesty. If I prove false, may this holy water be converted into the water of destruction, and may I be annihilated by it, under this shape, or under the shape of the red water of hell, or the water of stupefaction. May these weapons of war slay me, may the hatsúní, or lash of the sky, cut me in two, if I become a traitor to the lord of the red rice [Chau khau déng, alluding to the yearly festival which is held from the morning of the 14 th to the evening of the 16 th day of the fourth month, and is termed Wan trát lé wan Songkhraan (Sonkranti) Sam wan, on which three days the king distributes

[^101]coarse rice boiled to all his subjects present]. May the Devattas [genii Loci], Phra Su-a mu-ang, and Phra Song mú-ang, and Phra thau an mírít, who may be distinguished in the Songkhraan [or Sonkranti, in the fifth month, when the sun enters Aries], also Tong pí, and Phí sat, and P,hot and P,hrai, utterly destroy me. Should his sacred Majesty take the field, then if I shall prove a coward or traitor, may the sword of the enemy reach my heart, or may Phra Yakha [a Rakhsa] seize me; or may Phlai and Phlang [male and female elephants], or buffaloes or rhinoceroses all mad with rage, tread on and gore me, or may snakes or alligators, or huge fishes, prove my destruction; or let Mangkan [or horned alligators], Nguuk [or Mermen], P,hrai nam, [evil water spirits,] devour me. Should I traitorously countenance any of the king's enemies, may I be tortured to death, so that blood shall spout from my mouth, ears, and nose; then let my head be cut off, and my sinning soul be precipitated into the hell Lokanta, there to feed on filth, and suffer during the space of one hundred thousand infernal years, during which should one or more Buddhas appear on earth for the regeneration of mankind, may I be found in hell beyond the pale of their mercy !"

Art. XXIII.-A Dissertation on the Antiquity of the Armenian Language. By Arratoon Isaac Aganoon, of New Julpha: with some Notes and Observations by the late T. M. Dickenson, Esq., Secretary to the Bombay Branch of the Royal Asiatic Society.

Read December 17, 1836.

From all that is preserved in the Holy Scriptures, and in those ancient histories which treat of the subject now under discussion, we are justified in assuming, that from the days of Adam till the time of Noah, and subsequently till the confusion of languages at Babel, "the whole earth was of one language and of one speech." Genesis xi. l. The question, therefore, resolves itself simply into this: Was the confusion of tongues which took place at Babel confined to those who were engaged on that great work of impiety and rebellion in the plains of Shinar, or was the punishment inflicted on the innocent as well as on the guilty, so as to affect Noah and those of his descendants who remained with the venerable patriarch in Armenia? For if it be acknowledged that the language of Noah remained unchanged, I hope to be able to prove satisfactorily, that that language was the Armenian.

On this point there exists a great diversity of opinions: for although it appears to have been generally allowed, by several people of the most undoubted antiquity, as the Syrians, the Hebrews, the Chaldeans, the Egyptians, \&c., that the original language of Noah was preserved, still no two of them can agree in deciding which that original language was, each being more intent upon establishing its own pretensions to originality, than in fairly and impartially investigating the truth. As, however, none of them have adduced stronger arguments in support of their claims than those who contend that the Hebrew is the primitive and original language, I shall confine myself to making a few observations on their arguments and reasoning, in the hope of being able to prove satisfactorily, that they cannot be considered as sufficient or conclusive.

The principal argument, in favour of the Hebrew being the original language, is drawn from this circumstance; that most of the proper names of the antediluvian patriarchs retain in the Hebrew
the significations imputed to them in the books of Moses. ${ }^{1}$ Now as Moses was writing by the divine inspiration in Hebrew for the Hebrews, we may reasonably suppose that in rendering a word which was meant to be significant, although a proper name, he would give it in the language which was likely to be understood by the "people for whom he was writing. Thus, when in relating the history of Lamech, he wished to make known to the children of Israel, that that patriarch gave to his son a name expressive of the hopes he entertained at the time of his birth, when he said, "This shall comfort us concerning our work, and the toil of our hands," (Genesis v. 29) he states that "he called his name Noah," a Hebrew word expressive of "rest or refreshment," adapted to the comprehension of the Hebrew nation. In like manner other nations of antiquity, in the records which they have preserved of the same personage, have called him, not by his Hebrew name Noah, a word insignificant and unintelligible to them, but by other names, as Saturnus, Xisuthrus, \&e., words which in their own language were expressive of the idca which they wished to express. Thus, in our version of the books of Moses, where it is rendered in the English, "And he called the name of the, well Ezek, because they strove with him," (Gen. xxvi. 20,) we read, "He called the name of the well Zercooman;" not that we mean that the well was actually named Zercooman, but we use a

[^102]word signifying "deprivation," to express the idea which is represented in the Hebrew by the Hebrew word Ezek. In like manner Josephus, when he states that the Armenians call the place in which Noah descended from the ark by the name Apobaterion, ${ }^{1}$ does not mean that the Armenians actually used a word derived from the Greek, but merely that amongst them, the name of the place bears the same meaning as the Greek word Apobaterion, which implies "a going-forth," and is represented in the Armenian by the word Nakhijivan, the actual name of the place alluded to.

There are some, who contend that the language in which the books of Moses were written was the language of Adam, because, say they, it is manifest that Moses wrote in the language of Abraham, from whom he was descended; in like manner Abraham used the language of Terah, who used that of Shem, who used that of Noah, which was the language of Adam. ${ }^{2}$ This seems to me to be nothing more than begging the question, and hardly deserves the name of an argument, as it might be applied with equal reason in the case of any other of the languages of antiquity. There are, indeed, some who contend that Eber, the ancestor of the Hebrews, did not assist at the building of Babel, and that, consequently, his language remained unchanged. But the Greek histories, which have preserved this story, contradict it in other places, where they say, that it is recorded that Eber was actually the architect who superintended the building of Babel, under Bale, or Nimrod, who exercised a paramount authority over all. In a Greek work called the Smaller Genesis, Syncellus tells us, that there was a tradition, that

## ${ }^{1}$ Joseph. Antiq. I. i. c. 3.

${ }^{2}$ The reasoning whieh gives most weight to this assertion is drawn from the argument, that Abraham and his forefathers, in a direet line np to Noah, must be looked on as heirs of the eovenant, whieh God cstablished with Noah and with Adam (Gen. ix. 9, and iii. 15) ; that eonsequently we have no reason to suppose that they joined in the work of impiety whieh was punished at Babel, and that their langnage conseqnently remained nnaffeeted. This argument is ably set forth by Boehart, Phaleg. lib. i. c. x. To this, however, it may be answered, that a mere stipposition founded on human reasoning and opinion, on mere mortal ideas of what wonld be most advisable and expedient, is, when applied to the aets of God, one of the most fertile sonrees of error whieh the history of religion or of philosophy has reeorded. The natural and probable eonrse of events is a far safer gnide to the way of truth in a case so obseure as the one in question. Now if it be allowed, as I think it mnst, that it is natnral to suppose that Noah did not wander to any great distance from the monntains of Ararat, and that the original language, if preserved at all, was preserved to him; it must also be allowed that it is most probable, as being most conformable to the natural eourse of events, that the original langnage was preserved in Armenia, and that, therefore, in this part of the argument at least, the probability is in favour of the claims of the Armenians.
an angel appeared to Moses, and told him that he had taught the Hebrew tongue to Abraham the Chaldean, and that the Hebrew was, therefore, considered as original. But these accounts are cvidently as fabulous as they are at variance with each other and with the records of Scripture.

It cannot be doubted that Abraham spoke the language of the Chaldees. ${ }^{1}$-See Genesis xi. 28-31; Judith v. 6 ; Acts vii. 4. Now the Chaldees originally inhabited the country in the immediate vicinity of the land of Shinar, in which the confusion of tongues took place. Whence, then, the argument that the language of the Chaldees remained unchanged? But allowing that it did, we shall find ourselves far from the solution of the question; for the language of the Phœnicians, Syrians, Arabs and others, are, equally with the Hebrew, cognate dialects of the Chaldean, differing from each other, not in essentials, but only in the degree which may now be perceived in the several dialects of the Armenian, as spoken at Constantinople, at Julpha, and at Angulis, or in some of the languages of Europe which have been derived about the same period from a common origin. Moreover, if it is argued that the language of the Chaldees remained unchanged, I would ask who were the people whose language was changed at the confusion of Babel? There is no reason for saying it was Noah, and those who were with him in Armenia, because we are told that the miracle was performed at Babel, " where the Lord came down to see the city, and the tower which the children of men ${ }^{2}$ builded."-Genesis xi. 5. Nor can we say it was the language of the Persians, or of the Greeks, or of the Egyptians, because we have no grounds for supposing that Grecce and Persia and Egypt were then inhabited. The obvious answer is, that it was the people inhabiting the country in the vicinity of the place where the power of God was made manifest, who, or amongst whom, we have every reason to believe, were those who were subse-
${ }^{1}$ Ur and Haran, in Mesopotamia, are the places in which we first find the Chaldees established. Bochart takes a considerable liberty with geography in asserting that these early seats of the Chaldees, were "haud procul a Corduenâ in qua constiterat arca Nor."
${ }^{2}$ That Noah and those who remained with him were not intended by this expression, " the children of men," is thus ably argued by Bochart :
"Sed neque Noam aut Semum aut Arphaxadam aut Heberum, ad quos pertinebat foedus, conspirasse verisimile est, in tam insanæ substructionis fabrician, quia ridentur excipi, cum rersu $5^{\circ}$ descendisse dicitur Deus, ut videat civitatem et turrim, quam ædificabant $\square$ דאה ב fili hominum. Nam Genesis vi. verso $2^{\circ}$ filiabus hominum apponuntur filii Dei, ut fideles infidelibus; sic igitur insinuat Moses, solos filios hominum, id est solos infideles isti operi se mancipasse." Phaleg. lib. i, c. 10.
quently known as the Chaldees; from which it would follow that the present Chaldee, with its cognate dialects, the Arabic, Syrian, Phœnician, \&c., must be regarded as one of the great families of languages, the origin of which was at the confusion of Babel.

There are some, indeed, who assert that the present Chaldee is derived from the Hebrew, an opinion which is not only highly improbable, but which positively militates against the facts recorded in the Holy Scriptures. For it is related by Moses, that " the Lord had said unto Abraham, Get thee out of thy country and from thy kindred, and from thy father's house," which we are distinctly told was in the land of the Chaldees, from which it is clear that Abraham was a Chaldee; and while history shows us that the Chaldeans never migrated to any great distance from Ur and Haran, where we first find them established, and that they gradually rose to be a most powerful nation, we find that Abraham, with no other of his countrymen, save only those of his own household, "departed out of Haran," as the Lord had commanded him ; that he went down into the land of Canaan and into Egypt, and that he sojourned till his death in the land of the Canaanites; that his son Isaac also, and Jacob the son of Isaac, spent their lives in the same foreign land, where they dwelt 215 years. The sons of Jacob went down into Egypt, where they and their descendants remained for a farther period of 215 years, when they went forth under Moses to possess the land which had been promised by the Lord to Abraham, their forefather. It appears, then, that for a space of 430 years, the language of the Israelites was confined to one family, who were strangers and sojourners in a foreign land; and as, during this time, they dwelt upon tcrms of the closest intercourse with the people amongst whom they divelt, it is against all experience to suppose that they could possibly have preserved their language as pure as it was originally introduced by Abraham from Chaldea. We see, moreover, that the language in which the books of Moses were written, and which we must suppose to have been the language of the Israclites, though allied to the Chaldean, is nevertheless a separate and distinct language. It has also been shown that there are no grounds for supposing that the language of the Chaldees remained unchanged at the confusion of Babel; so that on every side the opinion of those who assert the originality and superior antiquity of the Hebrew language, is not only in the highest degree improbable, but is obviously opposed to any just conclusion to which fair reasoning and the records of Scripture are calculated to lead us; and as the arguments of other nations of antiquity in favour of the
originality of their own languages are not supported on better grounds than those which have been adduced on the part of the Hebrew, I will proceed to show the arguments upon which it is contended that the language of Noah, and consequently of Adam, has been preserved unchanged amongst the people of Armenia.

We are told in the Holy Scriptures that Noah, in the six hundredth year of his age, entered into the ark, taking with him seven other persons, namely, Noyemzara, his wife (whose name has been preserved amongst the records of the Armenians), and his three sons, Japheth, Shem, and Ham, with their wives; that the flood came down and continued till every living thing was destroyed, save only those which were preserved in the ark; that the waters prevailed upon the earth for 150 days, after which they gradually abated, and the ark at length rested upon the mountains of Ararat. ${ }^{1}$ These mountains were certainly in Armenia. In the Syriac and Latin translations of the Bible, the word Ararat is rendered "Armenia," which is also the case in the English version, in 2 Kings xix. 37 , and also in Isaiah xxxvii. 38. Jeremiah also uses Ararat for Armenia, li. 27. Joscphus (Antiq. lib. i. c. 3,) calls Ararat a mountain of Armenia, and states that Berossus the Chaldean called it Mount Cordus in Armenia; by which name it is called in the Arabic and Chaldean translations of the Old Testament. Abydenus also, Nicholas of Damascus, and others, agree in placing Ararat in Armenia. The oldest, perhaps, of these early historians is Maribas of Catene, mentioned by Moses Chorenensis, lib. i. c. 8, from whom ${ }^{\text {fhe }}$ writes, (lib. i., c. 11 and 14,) that the mountain was at first named Masis, from Amasia, our ancestor, whose name is still preserved in the town of Amasia, and that Ararat was the name of the district around it, so called from Aræus, another of our ancestors, and that it is also known by the name of Cordus, the general name of the great chain of mountains to which it belonged. Josephus also mentions, that in his time it was believed that the remnants of the ark were still in existence, which belief was strongly entertained amongst the Armenians, so late as the time of St. Jacob, Patriarch of Nisibeen, in the year A.D. 340.

[^103]These proofs, I trust, will satisfactorily prove, what few perhaps of my readers will call in question, that the ark rested on a mountain in Armenia; and as there is nothing in the language of Scripture, nor any circumstances which would render it probable that Noah would wander forth in quest of a place whercin to settle, far from the scene of his miraculous preservation, situate as it was, in one of the finest countries in the world, ${ }^{1}$ we are warranted in assuming that the patriarch, and such of his descendants as remained with him, established themselves in Armenia, speaking the language of the antediluvian world. Now we know from several examples which abound throughout the OId Testament, that it was customary in those times to fix the names of any new place, by some circumstance connected with its early history. Hence it may be inferred, that if in the country in which, as has been shown, Noah and his family descended from the ark, and fixed their residence, there are found any names significant of circumstances relating to the history of that early period, the language in which such names are significant, is the actual language which was then in use. Now according to the history of Moses of Chorene, the ark rested on Mount Masis in Armenia, at the foot of which mountain we find to this day a town and district, called Arnohwote; now this word !in Armenian, signifies " Noah placed foot," from Ar, "placed," Noh, " Noah," and wote, "foot." Again, in Genesis ix. 26, it is written, "And Noah began to be a husbandman, and planted a vineyard." Now adjoining to Arnohwote is a place called Akhooree, which signifies in Armenian, "he planted a vineyard," from Akh, " he planted," and oor, " vines." In the same vicinity is another place called Nakhijivan, which signifies "first halting-place," while others say it should be called Nakhsivan, ${ }^{\text {a }}$

[^104]which means "first departing-place," which is evidently, as the traditions of the country set forth, the place from which the first colonies cmigrated, and is the place which Joscphus calls Apobaterion, in which he tells us was the sepulchre of Noah. It is, moreover, stated in Armenian history, that on the death of Noah's wife, Noyanzar (or Nemzar, as she was called by some writers), her sons buricd her in a place which was consequently called Marant, ${ }^{1}$ which signifies in Armenian, "Mother is there," which name is still prescrved in a town of Armenia. Now as these places are all actually in existence, bearing in the present language of Armenia the singular meanings above assigned to them, they cannot but be regarded as strong proofs in farour of the proposition which it is my object to establish, that the language of Noah, and consequently of Adam, has been preserved amongst the mountains of Armenia.

It should further be observed, that there is nothing whatever in sacred history to which this opinion can be said to be opposed. For cven in the account of the confusion at Babel, it is stated "that the Lord did there confound the languages of all the earth." By there is meant the plains of Shinar, the land of Babel, not that of Armenia. For otherwise the word there would have been superfluous; and it cannot be said that a like reasoning will equally apply to other places as well as Armenia, and give grounds for asserting that the languages of the pcople of Persia and of Syria must also in like manner be supposed to be original, because we have no grounds for assuming that those countries were then inhabited at all, whereas we know that Armenia had been inhabited since the ark rested on the mountains of Ararat.

Many more arguments in support of my proposition may be drawn from a fair reasoning on the facts and circumstances which

Tavernier calls it Naksivan, and says of it, "Naksivan cst, selon eux, la plus ancienne ville du monde; clle a été lâtie à trois lieues de la montagne sur laquelle s'arrêta l'arche de Noé. C'est ce qu'indique le nom Arménien, forme de Nak, 'navire,' ct de Sivan, 'arrêté, ou demeuré.'"-Voy. de Taver., tom. i. c. 2.

The learned translators of Moscs Chorenensis thus make mention of it : "Joscphus (Lilu. i. c. 3.) de Noachi ex arcâ egressu agens, hree scribit, ćmoßatךpiov
 scentionis locum appellant. Jam vero nen longe a campo Araratensi sita est, urbs Armenixe celeberrima, quam Armenii uno ore vetustissimum mundi esse oppidum tradunt ut statim post diluvium, a Noacho conditum, nomine Nahhidshevan, quod vocalulam Armenincum, primum descentionis locum sonat."-Gul. et Georg. Whiston. in Preffat. ad Mosis Choren. Hist. Armen., p. iv.
*Maranta. "Les Arménicns prétendent, que ce fut le licu où Noé rint habiter en sortant de l'arche; ils ajoutent qu'il y fut enterré, et que sa femme eut son tombeau à Marante sur le chemin de Tauris."-Yoy. de Taver., tom. i. c. 2.
have been preserved regarding the point in question, some few of which I will here adducc. The confusion of tongues is generally allowed to have occurred in the second century after the deluge, which Noah survivcd 350 years. He must, therefore, have been alive at the time of the confusion. Now it is hardly to be supposed, that he to whom the Almighty had said, "Thee have I seen righteous before me, in this generation," (Genesis vii. 1.) and this, too, before the fearful manifestation of divine vengeance, from which he and his family were alone prcserved, should so soon afterwards have lapsed into rebellion against the Most High, by joining what is tcrmed a " wicked conspiracy," particularly as we read " that he was found righteous and preserved blameless anto God." (Wisdom x.) We may therefore suppose that the punishment of the wicked was not inflicted upon the "righteous one ;" that the language of Noah, and of those whose attendance on the venerable patriarch prevented them from following the migration to Shinar, was not affected by the confusion of Babel, and consequently that the ancient language of the antediluvians was preserved unchanged in Armenia. It is no where recorded where Noah died, but there is a tradition amongst the Armenians, preserved in a work called Zoowetsa, or "Thc Collection," which states that he was buried with his wife at Marant, to which Syncellus and Ccdrenus both bear witness; and Josephus, when recording the death of Noah, states, that after that event there was an emigration from Armenia, from which it would follow that Noah himself died in Armenia.

If it is allowed that the language of Noah was preserved in Armenia till the death of that patriarch, it cannot be said that it has been subsequently changed, because the ancient kings of Armenia were descended in a direct line from Haic, who lived with Noah in Armenia; and although our country has in later times been overrun and occupied by foreign powers, the language has not bcen materially affected, as may be seen by comparing it with the languages of those nations by whom it has been at different times overrun. ${ }^{1}$ I do not mean to say that it has not undergone, in the course of centuries, such partial changes as all languages, however perfect, are subject to; but I maintain that it has undergone no material alteration since the days of Noah,--that consequently it is the original language of mankind.

[^105]And indeed the beauty and singular perfection of the Armenian, ${ }^{1}$ even when viewed in its present state, must be regarded, by all who
${ }^{1}$ The Armenian langnage is a snbject which appears to have been very much neglected aud misrepresented. The acconuts of the writers of antiqnity regardiug it, are very imperfect. Strabo, who from writing so soou after the occupation of Armenia by the Romans, may be snpposed to have had as good an opportnnity as any other writer of antiqnity for gaining some information regarding the language of Armenia, evidently knew bnt little on the snbject; for he tells us, in one place, "that the Armenians and Medes were a eognate people with the Thessalians," (Geog. lib. xi. p. 531), and in anotleer he says, "that the Armenians appear to be nearly allied to the Syrians and Arabs." (Geog. lib. i. p. 41.) And to these he adds the Assyrians, the Arians, and the Erembi, as being considered a eognate people. It is not unlikely that he was led into this error by mistaling the language of the Armenian merchants, interpreters, \&c., who probably attended the armies of Rome in the Armenian campaigns, for the genuine and ancient langnage of Armenia. And even Sir William Jones appears to have been no less uninformed on the snbject, for he says "that he is convinced from the best information procurable in Bengal, that its basis was ancient Persian, of the same Indian stock witl the Zand, and that it has been gradnally elanged since the time when Armenia ceased to be a province of Iran." We have fortunately the testimony of several writers, whose knowledge of Armenian cannot be called in question, to show how erroncous are these opinions, and to corroborate the assertions contained in our text. Thns the two Whistons declare, "Cæterum linguæ Armeniæe antiquitas inde etiam comprobari potest, quod ab ullâ aliâ recenti linguâ nullo modo perflnxisse videtur." So also Cirbied: "Malgré certains rapports et certaines similitudes d'un rang primordial, la langue Arménienne est toujours une langue isolée, sans mélange avec auenne antre langue."-Page 6.
I With regard to the power of the Armenian language, for whieh our author contends, as a proof of its having been the original langnage of the earth, he is fnlly borne out by the most able writers on the langnage of Armenia. Thus the Whistons above quoted: "Quod si lingnæ Haicanæ natnram hoe e genere prospieere libet, tanta est ejus copia atque ubertas, sili maximam partem propria, non ab aliis gentibns adscita, quantnm ex studiis nostris cognoscere potnimus, ut vetustissimis temporibns primordia sna eepisse videatnr." So likewise Aneher, (in Præfat, ad Enseb. Pamph. Chron. Sect. ii. p. 11.) "Id vero tum Haicanæ linguæ nbertati ae felicitati tribuendum qnod in omnes prorsus dicendi modos insuetos etiam et peregrinos faeile inflectitnr," \&c. And again: "Sæpe fit, ut in qnibus e Greco transferendis, Latini maxime laborant, ea Armenii majore nescio facilitate, an felicitate convertunt." As to Armenian having been the original language, the following philosophical observation of Cirbied contains perhaps all that will be allowed on the snbject: "Des historiens," says the Professor, "et des commeutateurs de la Bible, ont sontenus que la langue Arménienne etait celle que parlait Noé, et qu'elle fut conservée en Arménie depuis le temps de ce patriarche jnsqn'à nos jours. Nous croyons qn'en admettant les traditions de certains auteurs profanes, avec l'antorité de l'Ecriture Sainte, cette opmion serait la plus probable dans cette question purement conjecturale."
: A general objection may be raised against the proposition maintained in this paper, on the grounds of the Armenian not having been a written language till the beginning of the fifth century of the Christian era, when Mesropes, abont A. D. 406 , organized an alphabet of the Armenian language ; after which it is allowed, that a
are capable of judging, as a proof that it possesscs beyond all other languages, ancient or modern, good grounds for claiming the peculiar distinction of bcing the original language of the earth. For it is a singular fact, that a native of Armenia, with a thorough knowledge of the language of his country, and of all the numcrous varieties of sound which its copious alphabet enables it to express, has little difficulty in acquiring and pronouncing the words of any
wonderful degree of alacrity was displayed by the literati of Armenia, who before A. D. 450 had translated above six hundred works of foreign literature into the language of their native country ; and this objection, it may be eontended, is an argument against not only the authenticity of the ancient traditions and histories of Armenia, but also against the antiquity of the language itself; but the objection, in my opinion, is not of much force. For the history of Armenia is drawn from traditions and written sources of the highest antiquity. Of the traditions, it is recorded by Moses of Chorene that the aneicnt Armenians had preserved in verses, whieh they sang to musie, records whieh extended as far back as the time of the deluge, and historical traditions of Semiramis and the early princes of Assyria. And, as regards the histories, that of Moses of Chorene was taken in great measure, as he himself deelares, from a famous book of Maribas Catenensis, who about the year before Christ 130, was sent by Valarsaces, king of Armenia, to examine the royal archives of the Parthian lings, among which he found a book whieh showed in the title page that it had been translated from the Clialdee by order of Alexander the Great, from which Maribas collected the materials for his own history of Armenia, which we are told he wrote in Greek and Syriac. Moreover the Armenians, although for many centuries they had no alphabet of their own, made use of those of the neighbouring nations, using chiefly the Greek and the Persian eharacters, of which it is recorded by Moses of Chorene, " that there were preserved amongst the Armenians, innumerable volumes of histories, \&e. written in these characters." The Syriac also was occasionally used, as we read in Diodorus Siculus, lib. xix. Neither is the want of an Armenian alphabet, till so late a period as the fifth century after Christ, any argument against the originality of the language. For the Arabie, at least the language of the Koreish, had no written character till a period later than that assigned to the alphabet of the Armenians; and although, as the Arabs pretend to assert, the greater part of the words of their language may be lost, we have reason to believe that the structure of that exquisitely beautiful language has never been materially affected; words and phrases, and accent and idiom, those modes of language which depend upon the memory or eapriee of men, may have changed perhaps as much among the Arabs, as we see they have in the nations of Europe; but their language bears about it, in the matchless simplicity and uniformity of its structure, that which must ever preserve it from corruption. The language of the most aneient writings of the Arabs, is the same as would be employed for a similar purpose by the learned of the present day, saving only some words and expressions which have fallen out of use in the course of 1300 years. And if in the structure of the language of Armenia, there is any thing of a similar preservative nature, it is, I think, certain, that the circumstance of there not having been for so many centuries any written claaracter or organized alphabet, is not a good argument that the language of the country has therefore, of necessity, been materially changed, or that it is not essentially the same language as was spoken in the early ages of the world, by the first settlers on the hills of Armenia.
other language whatever, as correctly as if it were his own native language; whereas in other languages, the alphabet of any one will seldom be found capable of expressing correctly the power of all the letters of any one other, even though that one be a cognate dialect, and nearly allied to the same original. And the same may be said of the power of our language, in its great capability for the clear and general expression of ideas; for it is well-known to all those who have made the attempt, that there is no difficulty in translating from any other language into the Armenian, and this too in such a manner, that the work translated, however difficult and abstruse it may be, will generally be found to be improved by the translation, whereas to translate from the Armenian into any other language, ancient or modern, is a work of the greatest toil and difficulty, as is shown by the translation of the Armenian history of Moses of Chorene, by the sons of the famous William Whiston, which while it evinces the singular industry and great knowledge of Armenian which these two learned Englishmen possessed, is at the same time a convincing proof to those who are enabled to form a judgment on the subject, that they were in many places far from understanding the spirit of the author, whose work they so carcfully and so ably translated.

I shouid, perhaps, observe what might by some be adduced as an objection, that it is related by some of the historians of Armenia, that Haic, the great founder of the Armenian nation, was actually present at the confusion of Babel, and that after that event he returned with a small party of followers, and settled in Armenia; and hence it might be objected, that as his language must have been changed at Babel, the language of Armenia would also be from him a changed language : on which I would observe in the first place, that it is not a generally received opinion that the language of Haic was changed at Babel; and in the second place, supposing such to have been the case, I would ask is it possible, I will not say probable, that a descendant of Noah, accompanied by only a small band of followers, should have been able to extirpatc the language of the patriarch and of those who remained around him in Armenia, and to instruct them all in a strange language? The affirmative of the proposition cannot be maintained with any appearance of proof or probability, and consequently the objection, although we allow it every advantage, must fall to the ground as undeserving of attention.

Art. XXIV.-Illustrations of the Languages called Zand and Pahlave; by John Romer, Esq., late Member of Council at Bombay, M.R.A.S., \&c.

Read July 1, 1837.

## Introductory Remarks, by Professor Wilson, Director of the R.A.S.

A paper has been entrusted to me for communication to the Society by one of its members, Mr. Romer, which offers some valuable contributions towards the determination of a question of considerable difficulty and great literary importance,-the authenticity of the Zand and Pahlaví languages, as they appear in the religious writings of the Parsis. A very wide and irreconcileable difference of opinion has prevailed, and continues to prevail, with regard to the genuine or fictitious character of these dialects, and every thing which tends to establish either beyond the possibility of controversy, cannot fail to be interesting to the Society and the public.

Without proposing to enter into a detail of the views which have been advocated by the eminent Orientalists who have expressed their sentiments on either side of the dispute, a brief notice of their conclusions may perhaps be of use in recalling to our recollection the principal points under discussion.

For our first accurate knowledge of the religious books of the Parsis of Gujarat, we are indebted, as is well known, to Anquetil du Perron. Both in his translation of the Zand avasta, and in some separate dissertations published in the Mémoires de l'Académie des Inscriptions, Monsieur du Perron has maintained the authenticity and high antiquity of the Zand and Pahlaví languages, in which those works are composed. The former he asserts to have been the spoken language of the countries between the Caspian and Black Sea, and of the upper part of Mesopotamia, or, in a word, of Northern Media, several centuries before the æra of Christianity. Pahlaví, according to him, was also spoken in the countries between Dilem, Mazanderan, and Farsistan, at least as far back as the date of Zoroaster, the reputed author of the Zand avasta.

These assertions of Du Perron were strenuously opposed by Richardson, in the Preface to his Persian Dictionary, who treats the claims of the Zand especially with great contempt, asserting it to be an invention of the Parsi priests; a barbarous jargon; a linguaFranca, culled from the dialects of every surrounding country.

Sir William Jones, in his Discourse on the Persians, addressed to the Asiatic Society of Bengal, expresses his opinion that no genuine books in Zand or Pahlaví exist, and that the dialect of the Gabrs is a late invention of their priests, subsequent, at least, to the Mohammedan conquest of Persia; the Pahlaví abounding with verbal nouns and infinitives, evidently formed on the rules of Arabic grammar, and the Zand, consisting of six or seven Sanskrit words in every ten.

Colonel Vans Kennedy, in his work on the origin and affinity of the principal languages of Asia and Europe, after a full examination of what had been urged in favour of the genuineness of the languages of the Parsi writings, concurs entirely with Sir William Jones, and asserts that his conclusion of their being late inventions, is incontrovertible. The Zand, he says, is a pretended language invented by the Parsi priests, and never actually spoken or written by any people upon the face of the earth. The same remarks, he adds, apply with still greater force to Pahlaví.

Mr. Erskine, in a letter to Sir John Malcolm, on the sacred books and religion of the Parsis, in the second volume of the Bombay Transactions, so far differs from the preceding, that he appears not to regard the Zand as a fabrication, though he sees no reason to believe that it was ever a spoken language within the limits of the Persian empire. He concludes it to have been a dialect of Sanskrit current in some part of India, and employed by the Parsi priests exclusively, in the composition of their sacred books. The Pahlaví he concurs with Sir William Jones in considering as a dialect of Persian, spoken on the confines of Syria and Mesopotamia, and much intermixed with Syriac and Arabic. The date of the compilation of the Vendidád he refers to the æra of Ardashir Babegan, or about A. D. 229, when the imperfect remains of the lost volumes of Zoroaster were written down from the recitation of aged Mobeds and Dasturs. Even Mr. Erskine, therefore, entertains an opinion, not very favourable to the authenticity of the only monuments in which the Zand and Pahlaví are said to be preserved.

The English authorities are, therefore, unanimously opposed to the antiquity of the sacred writings of the Parsis, and to the genuineness of the languages in which they are composed. On the other hand, the Continental writers are equally unanimous in advocating their authenticity. Adelung, in his Mithridates, advances, in opposition to Richardson, that the invention of the languages is contrary to all probability, and that the Zand must be considered as a real language, which was once actually spoken. The Baron de

Sacy has attempted to explain various ancient inscriptions found in Persia, upon the principle of their being in the Pahlaví language; and Grotefend and St. Martin have attempted to read some of the arrow-head inscriptions, on the supposition that they are written in Zand. The late Professor Raske, in reply especially to Mr. Erskine, has published a defence of the authenticity of the Zand and Pahlaví languages, the principal arguments of which are comprehended in a letter to Mr. Elphinstone, which is published in the Transactions of the Royal Asiatic Society. Professor Raske maintains, that the Zand was a living language, the spoken language of Media, and that the Vendidád, as it exists, was composed before the time of Alexander the Great; farther he does not pretend to go, nor does he undertake to decide the date of Zoroaster, to whom he ascribes the authorship of the work. Mr. Raske's views seem to have been implicitly adopted on the continent. M. Burnouf, at Paris, has lithographed the text of the Vendidád, and has published two volumes of an elaborate translation of, and commentary upon, the Yashna; and Professor Bopp has taken the Zand for the basis of an extensive comparative grammar of it, with the Sanscrit, Greek, Latin, and Teutonic tongues. It is evident, therefore, that these last two writers consider the question as decided, or they would not devote their time and talents to such laborious illustrations of the Zand and Pahlaví languages.

Notwithstanding, however, the asserted opinion of Continental scholars, or the inference that is to be drawn from the labours in which they have engaged, it is impossible, in the face of the assertions and reasonings of our own equally eminent Orientalists, to feel quite convinced that the former are in the right ; and it is obvious, that the subject requires farther and more deliberate investigation. One of the chief means for the accomplishment of this object is, access to the original texts, so as to comprchend, generally, the structure of the language, without being obliged to acquire a knowledge of it, which, in the present state of the study, must be, as M. Burnouf admits, necessarily imperfect. Some notion of its principles may, however, be possibly collected from the careful inspection of passages from the Parsi works, and from their collation with modern Persian ; and it is this facility which Mr. Romer proposes to furnish, in the communication to which the attention of the Society is now invited.

## Mr. Romer’s Illustrations.

Colonel Vans Kennedy, in his" Researches into the Origin and Affinity of the principal Languages of Asia and Europe," after an able examination, p. 169, et seq., of the different opinions maintained by Orientalists, as to whether the languages known among the modern Parsis by the names of Pahlaví and Zand are genuine tongues, formerly spoken in Persia, or nothing better than fabricated jargons, closes this part of his argument in the following words: "If, therefore, no proof can be adduced to establish the authenticity and antiquity of the Parsi books, it necessarily follows, that they cannot be received as evidence of the existence and antiquity of the languages named Zend and Pehlevi. The opinion, consequently, of Sir William Jones cannot be controverted; for he remarks,-‘ This distinction convinces me, that the dialect of the Gabrs, which they pretend to be that of Zerdesht, and of which Bahman gave me a variety of written specimens, is a late invention of their priests, or subsequent at least to the Musulman invasion; for, although it may be possible that a few of their sacred books were preserved, as he used to assert, in sheets of lead or copper, at the bottom of wells, near Yezd; yet, as the conquerors had not only a spiritual but a political interest, in persecuting a warlike, robust and indignant race of irreconcilable conquered subjects, a long time must have elapsed before the hidden scriptures could have been safely brought to light, and few, who could perfectly understand thenı, must then have remained; but as they continued to profess amongst themselves the religion of their forefathers, it became expedient for the Múbeds to supply the lost or mutilated works of their legislator by new compositions, partly from their imperfect recollection, and partly from such moral and religious knowledge as they learned, most probably among the Christians with whom they had intercourse."

The means of satisfactorily determining this question would, perhaps, be a present of some value to the literary world. I do not, however, presume to offer myself as competent to such an undertaking; but being in possession of some materials, the application of which may assist in throwing light on the subject by the mode of using them, I have not deemed myself precluded from laying them before the public in the shape thought most perspicuous, from considerations of my humble pretensions to Oriental knowledge, and this the more especially, since I shall confine myself to this single object, obtruding little as opinions of my own.

In explanation of the plan of comparison adopted in this paper, and of the way I was led to believe such a mode of exposition might be useful to the end proposed, I would refer to the Dasátír, the publication of which entirely dissipated with me, as it must have done with others, all doubts as to the genuineness of the tongue in which it is said the text is composed. The simple examination of what is called the original, in juxtaposition with the (misnamed) translation into Persian, cannot fail to convince any one acquainted with this language, that the Asmání Zabán is pure invention, the book having, in fact, been first written in Persian, and then translated into the uncouth jargon dignified with a name from Paradise.

The result of this proceeding with the text and alleged translation of the Dasátír induced me to try a similar one with the Zand and Pahlaví, with the view of conveying some notion of their grammatical construction, if they possess any; and the extracts from the books in these languages, here following, have been made and disposed with this object. They are given in the Roman character, because, probably, few men of letters would take the trouble to master the alphabets employed in writing the Zand and Pahlaví, in order to institute a comparison between these and other languages. I should also add, that the transcriptions are made from copies in which the Zand and Pahlaví originals are underlined with their words expressed in Persian letters. I likewise subjoin a scanty specimen of the elements of Pahlaví grammar obtained from a Dastúr, (it was all his store,) who professed extensive knowlcdge of the language.

The short account of the book named Dín-kard, is offered to Orientalists, as bringing to their notice a work I have not seen mentioned.

The late Múlla Fíroz, of Bombay, in a controversial work on the Pársí year, called Kitáb-i-Avízhah Dín, in which he cites many passages from the Dín-kard, quoting the third Daftar of the book, says,-" The translator of the Dín-kard from Greek into Pahlaví himself states, that the original Dín-kard was composed in the time of king Gúshtásp, and that the book now extant and known by this name in Pahlaví, is not the original Dín-kard, that book having been burnt by Alexander. That translations of it into Greek, made by order of Alexander, and subsequently, also, by direction of Ardsher Bábágán, were preserved and remained in Persia until the Arabian conqucst. That the reliques of these ancient and mutilated translations falling into the hands of a learned man, named $\bar{A}$ darbád, he put them together to the best of his ability, compiling, from what remained intelligible to him of such
materials, a new book in the Pahlaví language. That it is nevertheless doubtful, whether the Dín-kard, extant, is the work of Ādarbád, or of some other person ; but, be this as it may, it is certain the book was brought to India from Persia. In the text the author is named Máwandád, son of Bahrám Mihrbán ; the date of writing the book, the year 369 of Yazdijird, A. d. 999 . In A. y. 865 , A. D. 1496, it was transcribed by Shaharyár Ardsher, and another copy appears to have been made by Mawandád Bahrám Ardsher, of Túrkábád, in A. Y. 1009 , A. D. 1639.

In the following extract from the Vendídád, of which work several passages are given in Múllá Fíroz's book, Kitáb-i-Awízhah Dín, the Pahlaví version and Persian translation, with the former underlined in Persian letters, are by the Múllá. The Zand is not interlined, but the words of the text are, separately re-written in Gújarátí characters, by the assistance of which the subjoined transcription of it, in Roman letters, has been made and verified.


Arth. Púchhiyún Zartoste Úrmazdne, e Úrmazd Minúí aurdhí karnár, ane ostakhánwand dúniyá ná paida karnár, ane ashú; kihwáre te múela ádamí upar te Duroj Nasash daúre? Jawáb dídho Úrmazd ki shitáb múá pachhe e sapetmán Zartosht ki je májdaiásní dín nú ádamí gúzare, ane tehnú jíú baland kálbúd máhán thí nísare ki shitáb tehej waqt mán, tená kálbúd úpar te jago mán, te Daroj Nasash te kalbúd úpar daúre. Yáne, je adamí gúzare tehenú jíú tehená kálbúd máhán t,hí níkale, shitáb tehej waqt tehej jago mán, tehená kálbúd úpar Duroj Nasash baise awákhtar ní taraf t,hí g,hand,háto mák,haní súrate úre ; ane tehená got,han ágal une pach,hwárí gánd; une beshumár daram, yane, ch,hánt g,haní chándala ní misále tehená tan úpar ch,hánt ekek ane b,herwálí ane te g,hand,háto úre kharafstar ní misál no rím ní b,harelo g,hanoj ríman.

## Translation.

" Zartúsht asked Úrmazd, ' O Úrmazd, maker of the sky, creator of the world and heaven, when does the Daroj Nasash (Evil Spirit,) attack the dead man ?'
" Úrmazd answered, ' Immediately after the death of one professing the Májdaiásní faith,-the religion of Sapitamán Zartúsht, life having gone forth from the body, then quickly, at the very moment, and upon the spot, the Daroj Nasash flies upon that corpse.'
"That is, when a man dies, and his soul quits his body, in the instant and on the spot, the Daroj Nasash quickly alights upon the corpse, coming in the form of a carrion fly from the quarter of the North, and sitting about the knee and anus. Then the body must be lavigated with copious and innumerable sprinklings, that that carrion fly may depart filled with corruption and matter."

Here is a passage from a letter written at the beginning of the last century, by the Pársís of Kirmán to the Pársí communities"of Surat, Broach, and Nowsarí, which is of some curiosity, as explanatory of customs connected with their religious observances in the disposal of their dead.

*     *         *             * "Touching what you write concerning that praiseworthy and exalted work, the noble tomb, 'which he of the good faith, whose dwelling is Paradise, whose soul is in heaven,Nhánáb,haí, son of Púnjiyá, founded, at a time, as the event proved, when he did not expect to behold its completion, for Nhánáb,haí died before the tomb was finished, leaving a will in which he directed
that his remains should be deposited in the noble tomb when ready to receive them. That upon the death of Nhánáb,haí, the Dastúrs and elders of your country assembled together, consulted and resolved that the corpse of Nhánáb,haí should be conveyed to an old tomb, and there placed, with a slab of stone below it and another above, and this was done accordingly. That two months after this disposition of the remains, they were removed and deposited in the new tomb. And that, thereupon, ——_ stood forward and denounced this removal as an act contrary to our religion.
"Now, be it known to you, that the Zand and books of the Good Faith declare, if a corpse be placed in a clean spot, where are not the remains of another body, slabs of stone being put below and above it, having been borne thithcr, dressed in grave-clothes, by two men of the Good Faith


بـ بأج
'bawáj-i-awastá wa sag-díd,' with ' recitation of the Awasta and Doggazc ;' this is certainly allowable, proper, and right." * * * * *

The "Sag-did," that is, dog-gaze, is the ceremony of bringing a dog to look upon the dead body; for, according to some superstitious notions of the Pársis, evil spirits are driven away by the presence of the dog, and the fate of the deceased's soul may be, they think, guessed at, by the manner in which he regards the corpse. This usage they do not willingly make known; the term wint therefore, instead of being thus written, in the text, is, as here shown, concealed from the vulgar eye under the veil of Zand letters.

The book of Múllá Fíroz also contains extracts from the first Kardá of the Yajisni.-The Zand text is accompanied by a Pahlaví version, not procurable by Anquetil du Perron, as M. Burnouf informs us, regretting the want of it. The former is rewritten in Gújarátí characters, and literal and idiomatic translations, in that language, arc added; they are made, apparently, from the Sanskrit of Niríosang, h, and the version of this Mobid is also sometimes given. The Pahlaví is not underlined in Persian letters, as in the extract from the Vendídád, but it will, on reference, appear in the place it occupies in the Kitab-i-Awízhah Din*.

On M. Burnouf's researches into the origin and meaning of the Mobid's name Niríosang,h, it may be remarked, that Narsing,h, like others taken from their mythology, such as Krishn, Kalí, Dúrgá,
*This book and other papers, from which these extracts have been made, are now in the Library at the India House.

Rám, \&c., is a common proper name among the Hindús; in Gújarát, it is usually abbreviated to Narsí. But what is more to our purpose, as accounting for finding a Mobid under such an appellation, the Parsís of the present day, following the practice of their immediate forefathers, freely adopt Hindú proper names, having significant meanings; hence, in almost every family we meet with Jíwan-jí, Kúnwar-jí, D,han-jí, Mánik-jí, and the like.

The extract from the Yajisni that follows, is the same given by M. Burnouf, at pages 105 and 146, of "Commentaire sur le Yaçna." It has been put into Roman letters through the assistance of the Gújarátí transcription before-mentioned. The Sanskrit is from M. Burnouf's work, and compared with a MS. of a few pages, containing, with the Zand text, a Pahlaví version, the Sanskrit of Niríosang,h, and its translation into old Gújaráti. The Gújaráti given below, is from the Kitáb-i-A wízhah Dín.

| Z. | Niwídaicmi | háankairimi | dat,hoso | Uhorúmazdae <br> maha gyáninam |
| :--- | :--- | :--- | :--- | :--- |
| S. Nimantriyámi | sampúran | cha karomi | dátáram | Swáminam |
| G. Notrún deún ch,heún | tamám | karún ch,heún | dádár | Úrmazd |

Z. Ríwatú
S. Súdd,himantram
G. Núr-b,harelo
Z. Walistalícha
S. Vapúsháútlkrishtaram cha múlyen
G. Múle karí g,hano únchá ch,he
Z. Kharochdistahícha
S. gár,hataram cha káryanyáyai
G. g,hano d,háro insáf no kám mán
mazistahícha
mahattaram cha kila moto saríre
sarístahicha
súndrataram cha darsnen
g,hano sáro ch,he jowâ mán
kharit,hwihistahícha
buid, hitamam gayánitamam
g,haní búd,hí no gniyání
Z. Húkiripatitímícha
S. Súkale wartamam cha kilásya angánin anyonya anúrúpatarámi
G. Atíso sáro sarí no
Z. Asád apanútimhíclà
S. púnyát prad,hántamam cha sadáchárát kila Húrimmazdát yadd,hapú púnyentanmahattaram
G. pún no g,hano moto
Z. Húdaimanú
S. úttam gayáni kila sadyápárgnyaní
G. rúda gniyán no
Z. wú,úrú rafanag,hú
S. k, hích ch,hánanádí kila aparán ab,hípistataren ánanden kúrúte
G. Ich,há ná krhwálisish ne ánandíní samastání ni

| Z. Iú | nú | dada | iu | tatas |
| :---: | :---: | :---: | :---: | :---: |
| S. Yo | asmán | dadáu | yo | d,hátyámás tanúbibam |
| G. Ki | ápane paidá | kíd,hà | ki | d,hariántan |
| $Z$. íu | tot,hıúí | íu | míníú | sapiántútímu |
| S. yalı | prityapalayat | yo | addashy | ,hyo brihattarah |
| G. je | pálnár | ki | mínú t , | búzúrg g, hano |

Z. Niwídaiemi haánkaírimi
S. Nimantriyámi sampúranyámi
G. Notrún deún ch, heín sampúran karún ch,he,ún
Z. *Wag,hewahemanag, he
S. Gwahman námanam amaram gawám pashúnam patim
G. Bahman Amisáspand ne
Z. Ushaiwahíshtái
S. Ashwahist n. u. agninám patim
G. Ardebihisht Amisáspand ne
Z. Khasat,haráiwairiyái
S. Shaharewar $n . u$. sapta d,hatúnám patim
G. Shaharewar amisáspand ne
Z. Sapiántaiyármaiti
S. Spindármad n. u. Prit,hwí patim
G. Sapindarmad Amisáspand ne
Z. Haúrúadbiyú
S. Uwidad n. u. apám patim
G. Khúrdád Amisáspand ne
Z. Amiritadbiyú
S. Amirdád n. u. banspatínám patim
G. Amardád Amisáspand ne
Z. Gíúshtashnú gíúshúrúnai
S. Gústanúm gorátmánam
G. Gosfandonántan ne gosfando no rawáno ne
Z. A,tharai Ahoraimazdai
S. Agnim Horimmazdasya
G. Atash ne Urmazd na
Z. Íaitústimai
S. Samagantritámam amarib,hyo gúrúb,hyah chinheyáto
G. g,hano pochálo
Z. misanám
S. asima dit,hi prápte stah parlokashya ih lokashya cha
G. malclo ch,he
Z. sapiátaúrám
S. angáro jyotischa
G. amargwará amisáspand.

* This word, and those which follow in the Zand, appear to be barbarous inventions to disguise well-known proper names.


## Literal translation of the Guijaráti.

"I give invitation, I make complete (invocation to) the just Urmazd, full of light, full of splendour, great in form, in origin most high, excellent to behold, for many days in works of justice; very wise, very intelligent, of pure body, most virtuous and wise, accomplishing happily desires and wishes; self created; the preserver ; greatest and most venerable in heaven.
" I invite, I make perfect (invocation) to the Amisáspands Bahman, (from the Sanskrit,) lord of cows and beasts. Ardebihisht, lord of fire. Shaharewar, lord of the seven minerals. Sapindarmad, lord of the earth. Khúrdád, lord of the water. Amardád, lord of trees and foliage. Gústanam, (from the Gújarátí,) guardian of sheep and flocks. The fire Úrmazd, the most penetrating and influential of the Amisáspands."

From the Vispard,-Zand text, Pahlaví version, Persian translation ; from the Kitáb-i-Awízhah Dín.

| Z. Niwídaiemi | haánkairími | Maidíśshimahí | wásatarú |
| :---: | :---: | :---: | :---: |
| Pah. Nawídínam | wánkardínam | Mídíoshaham | wástar |
| P. Bakhwánam | tamám kúnam | Mídíoshaham | parvarish |
| Z. dátaníehi | ashaúnú | ashahi | rat, hawú |
| Pah. úrúnishi | ahlob | ahlaísh | rad dín |
| P . áb andarúní | asho | ashwiyí | búzúrg andar |

## Translation:

"I call upon, I perfect (invocation to) Mídíosham, (one of the Ghumbars,) preserver of water, splendid, pure, and great".

From the "Din-Kard."-The Persian translations by the late Múllá Fíróz and a Dastúr of Surat.

By Málla Fíroz.

| Pah. Madam | kaná | babá | angúshídah | raúshaní | min | bán |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| Per. | Bar | har | báb | hamín rawish | raúshaní | az | ágház |
| Pah. raúshan | zak | bún | púnsishan | wajar | dahíwúd |  |  |
| Per. raúshan | án | ágház | pursish | jawáb | pádsháh |  |  |
| Pah. buzand | Kaí Washtásp | paní kíníd | bún | bún |  |  |  |
| Per. sazáwár | Kaí Gúshtásp | nawisht | ágház | ágház |  |  |  |
| Pah. ú ganj | Saspígán | ospard | pazhín | pashízkíhá |  |  |  |
| Per. uá ganj-i- | Saspígán | sipúrd | naql | sákhtah |  |  |  |


| Pah. | wastardan | parmúd | min | zak | áhir | pazhín |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Per. | gústardan | farmúd | az | án | pas | naql |
| Pah. | ú dazlı | napisht | shadúníd | tamamnich | dáshtan |  |
| Per. ú qila | nawisht | firistád | ánjá | dáshtan |  |  |

Pah. ágáhi
Per. ágáhí (dád)

| Pah. | Dín | wazand | min | marah | dúsh | kadman | Arsúd |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| Per. | Andar | gazand | az | rahzan | bad- | khíra | Sikandar |
| Pall. á İrán | sitún | dín | khodáí | mad | zak | pún | dazh |
| Per. ú Îrán | shahar | dín | khodáí | rusud | án | ba | qila |


| Palı. | napishtan | ú sojishan | zak | pún | ganj |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| (á |  |  |  |  |  |
| Per. | nawishtan | ú sokht | án | gunj-i | Saspígán <br> Saspígán |
| Palı. ú padnam | Arúmáyán | mad | apash | úilı | Yúdnáí |
| Per. ú dast-i- | Rúmiyán | rasíd | azú | án | Yúnání |

Pah. hazwán wajárad pún ágáhí min peshíní gupt...
Per. zabán guzárishkard ba ágáhí az peshíngán guft . . .

| Palı. | Ahir | min | wazand | washúpshan | min | Tazikán |
| :--- | :--- | :---: | :--- | :--- | :--- | :--- |
| Per. | Pas | az | gazand | kharáb shudah | az | Táziyán |

Pah. úih díniyán ganj kishwar mad lúparwad Átúnbád

| Pah. Åtúrfarobag | Farúkhzádán | húdíniyán | peshpáa |
| :--- | :--- | :--- | :--- | :--- |
| Per. Ádarfarobag | Farúkhzádán | nekdíniyán | peshwá |


| Pahl. | zak | pazhín | lastíhá | Pirangí | jánúníd | nú apzar |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Per. án | naql | kohnahá | Firangí | búd | naú afzar |  |


| Pah. | dín | awasták | zand | Púriyúdkeshán |
| :--- | :--- | :--- | :--- | :--- |
| Per. | din | awastá | zand | Púriyúdkeshán |


| Pal. | anjúshídá | paírawi | min | zak | bará | rakhar | kard |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Per. | hamín rawish | paírawi | az | án | nekí | báz | kard |
| Pah. | pún | slagápt | áram | zand | Zartúhusht |  |  |
| Per. | ba | shagúft | áram | zand | Zartúsht |  |  |

## By the Dastúr.

| Pal. Farjá | fud | pún | shúm | á shádiyá | wa rámashan |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Per. | Tamán | shud ba | darúd | ú shádi | wa ramshani |


| Pah, dín yaúm-e-Anhúmá | min | bíná Sapandúmad | Shanat |  |
| :--- | :--- | :---: | :--- | :--- |
| Per, andar | roz-i-Úrmazd | az | máh-i-Sapandúmad | Sál |


| Pah. Per. | 865 áhir 865 bád | $\min _{a z}$ | slanat-i-rúr bilh <br> Sál-i man <br> aúi  | Yakhand Malikán Yazdijird Malikán |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pah. | Malikai | Shatanyárán | nawishtah | ham | ra dín |
| Per. | Malikai | Shaharyárán | nawishtah | ham | man dín |
| Pah. | bandah | Shatanyár | Yardasharí | İrichí | Rústamí |
| Per. | bandah | Shaharyár | Ardshír bin | Irich-bin | Rústam-bin- |
| Pah. | İrichí | Kúbád | Tránshá | nawishtah | húmam |
| Per. | Irich-bin | Kúbád | Íránsháh | nawishtah | ham |
| Pab. | fanaj | shabkúd. | Gúman daftar | pazhín | min |
| Per. | pesh | guzásht. | In duftar | naql | az |
| Prh. | daftari | Sapandíh | hid kanad | húmam. |  |
| Per. | daftar-i- | Sapandih | kad kardah | am. |  |

From the "Dasatír," p. 222, et seq., original Text and Translation as printed.

| $\begin{aligned} & \text { O. } \\ & \text { Per. } \end{aligned}$ | $\begin{array}{ll} \mathrm{Fa} \\ \mathrm{Ba} & \mathrm{~S} \\ \mathrm{n} \end{array}$ | $\begin{aligned} & \text { Sám-i-i- } \\ & \text { nám-i- } \end{aligned}$ | Mazdám, Yazdán, | $\begin{aligned} & \mathrm{hi} \\ & \text { ai } \end{aligned}$ | farjíshwar waklishwar | Hartáband <br> Zartúsht |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0. | pal arjum |  | dash | haikár | hawad | o fír |
| Per. | pas-i-tú |  |  | chamr | shawad | o pas |


| O. | hurmín | Sarsad | wakhshwar | háyad | ú kirtás-i-tamkáa |
| :--- | :--- | :---: | :--- | :--- | :--- |
| Per. | nakhústún | Sásán | paighambar | áyad | ú námah-i-túrá |

0. láspar

Per. hamsírazí
nídah furúnad.-
raúshan sázad. -
o. farpúd-i-Nashab

Per. púr-i-Dáráb
o fardíshwarí
Per. pádsháhí
wa
0. fúzúr

Per. búzúrg
$\underset{\substack{\text { Mazdám } \\ \text { Yazdán }}}{ }$
$\underset{ }{\text { jáshwarí }}$
jahángírí

Hí Símkandash
Aí Síkandar

| arjumká | fa |
| :--- | :---: |
| turá̃ | ba |
| fartákht, | zandím |
| bardấsht, | ain- - - |

yo fúzúrdarím-i-farjíshwarán ki bưzúrgtarín-i-paíghambarán
o. ád fa pútfar shálishwarí farochíz kum
Per. ast ba bisiyár dánishwarí áslkárá kun

| 0. Per | Amar | haz | harmudi-i-tam lashkar-i-túa | pam |  | harásnám-i-Híras |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0. | tazáráh | rasmídah | atúsh | wun | wa | híshám |
| Per. | ázárí | rasidah | patít | kun | wa | íshân |


| 0. | ar | wardán | wahar | la | haz | arjûm | m. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Per. | khúshnúd | gardán | war | na | az | tú | pan. |

## ELEMENTS OF PAHLAVÍ GRAMMAR.

## PERSONAL PRONOUNS.

Pahlaví.
Sing. Ra or Awam.
Rak or Awat. Warmín.
Plu. Rúmún
Rakúm
Gúmishán

Persian. Man.
Tú
U
Ma
Shumá
Ishán
Relatives.
Dak or Zak.
Dakán or Zakán. Gúman
Gúmauán.

Án. Ānhá. In.
Innán.

English. I.

Thou.
He.
We.
Ye.
They.

## Reciprocal Pronouns.

Sing. Awam* wapshaman.
Rak wapshaman.
Warmún wapshaman.
Plu. Rúmún wapshaman.
Rakúm wapshaman.
Gúmishán wapshaman.

Man khúd.
Tú khúd.
U khúd.
Má khúd.
Shumá khúd.
Íshán khúd.

I, myself.
Thou, thyself. He, his self.
We, ourselves.
Ye, yourselves.
They, themselves.

VERB. Infinitive.
Jamnúnatan or Jamnúratan. Guftan. To speak.
Preterite.

Sing. Awam jamnúníd. Awat jamnúníd. Warmún jamnúníd.
Plu. Rúmún jamnúníd. Rakúm jamnúníd. Gúmishân jamnúníd.

Guftam.
Guftí.
Guft.
Guftím.
Shumá guftíd.
İshán guftand.

I spake.
Thou speakest.
He spake.
We spake.
Ye spake.
They spake.

## Future.

Sing. Awam jamnúnishíd. Awat jamnúnishíd. Warmún jamnúnishíd.
Plu. Rúmún jamnúnishíd. Rakúm jammúnishíd.
Gúmishán jamnúnishíd.

Khwáham guft. I will speak.
Khwáhí guft. Thou wilt speak.
Khwahad guft. He will speak.
Khwáhím guft. We will speak.
Khwáhíd guft. Ye will speak.
Khwáhand guft. They will speak.
${ }^{3}$ This word in its form and import has every appearance of being taken from the Hindí Apan-Apas.

## Imperative.

| Pahlaví. | Persian. | English. |
| :--- | :--- | :--- |
| Jamnún. | Bagú. | Speak thou. |
| Jamnúnid. | Bagúyíd. | Speak ye. |
| Lál jamnúnid | Nagúyad. | Let him not speak. |
| Lá jamnúnand. | Nagúyand. | Let them not speak. |
| Awam lâ jamnún. | Nagúyam. | Let me not speak. |
| Rúmún lá jamnún. | Nagúyím. | Let us not speak. |

The modern Pársís are not behind their ancestors in the desire to mystify, or to interpolate a date, where they find an opportunity. For instance, there is a copy of the Vendidád in the Library at the India House, one of the books collected by Mr. Guise, surgeon at Surat, which both from the state of the writing and the effect ${ }^{2}$ of the ink on the paper is manifestly a MS. of some antiquity; it is incomplete, and at the bottom of the last page there is added in Zand and Persian characters, the letters fresh, and quite distinct from those of the text, "Six hundred and fifty-two," a date corresponding with a.D. 1282. This date is also referred to in a Gújarátí note at the beginning of the book, but it is evident it cannot be that of the actual time at which the book was written, probably between two and three hundred years ago. In the catalogue of Guise's books the date, by mistake, is made 125 of Yazdijird.

The period of the arrival of the Pársís in India is involved in doubt and obscurity. According to the traditions of this event, as they would appear to be preserved in their only historical work extant, a short poem named "Qissa-i-Sanján," written about $\Lambda$. D. 1600 , some Persian families in the reign of Khúsrú Parwez, warned by a prophecy of approaching evil, retired to the mountains of Khorassan, it is said, forty-nine years before the era of Yazdijird. There is, however, an error here, for Khúsrú Parwez began his reign A. D. 591, or only forty-one years before the accession of Yazdijird in 632. These families and their descendants, the story goes on to say, continued in Khorassan for a hundred years, and then quitted the country for the island of Ormaz, where they sojourned fifteen

[^106]years, and then sailed to Diu on the coast of Gújarát, whence, after a residence of nineteen years, they passed over to Sanján (St. John's), a place on the continent of India, south of Daman.

The following is an amusing example of their love of effect, where they thought something magnificent and high-sounding was attainable. Since the division among the Pársís of India, which arose nearly a century ago on the subject of computing their year, the era of Yazdijird-distinguishing names between the parties have been introduced. This era, known at the time in Persia by the name of "Sál-i-qadím," was found to differ from that observed by the Indian Pársís by one month, commencing just thirty days earlier according to the names of the months, than the Indo-Persian year. A Pársí had been deputed to Persia to inquire into the matter ; he was a chúrígar, or bracelet-maker, and appears to have seen reason for following the custom of Persia; on a small number of the community adopting his opinion, and resolving to correct their year and bring it to the Persian standard, it received the name of its introducer's business, and was called Chúrígar, as well as Sál-i-qadím, and its observers Chírígariyáns and Qadímís. The great mass of the Pársí population, however, adhered to the cxisting cra, and thenceforward took the names of Rasamiyán and Shaharsáiyán from their year, which was denominated Rasamí, "customary," and Shahar-sáí, or "city-like," "common;" and these names continue to prevail among this people, to their separation in many things of social and religious observances and duties.

During another dispute which began some years ago among the Pársís of India regarding the observance of the Kabísa, or intercalary month, and is not ended yet, some one proposed to substitute for the wöd "Shahar-sái" with its Gújarátí affix, as a corrected reading, Sháhansháhi, and thus convert the vulgar into the imperial year, and simple citizens into kings of kings. The thing was considered a joke, and laughed at by the Qadímís and their leader Múl-lá-Fíróz, as passing the reception of the most ignorant; nevertheless the absurd change has been adopted, and among others by the Editor of a lithographed version of the Vendidád, a copy of which was presented to the Asiatic Society; departing from the hitherto unvaried usage, he dates the dedication of his book on "t the 1st day of the 5th month of the Sháhansháhí year 1200," instead of writing lst Shaharewar, 1200 Shaharsaí or Rasamí. But this is surpassed by a writer on the Kabísa question, who, professing to follow the authority of the "Qissa-i-Sanján," (innocent, I am bound to add, of
the egregious anachronism), gravely informs his Pársí readers, that it was the persecution of the Portuguese which compelled their ancestors to quit Diu, an event, we have seen, that occurred about the year of grace 717 .

I now give further extracts from the Dín-kard, which will serve as specimens of Pahlaví, compared, as a language, with Persian.


| Pal. <br> Per. | $\begin{array}{ll} \text { mún } & \text { jásúni } \\ \text { ki } & \text { nigálı } \end{array}$ | jásúmishmal sipírún nigál dáshtan-i-nekán |  | $\begin{aligned} & \text { aú } \\ & \text { wa } \end{aligned}$ | arújashnah á namúdan | suríratáu badán rá |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pal. | wádúndín. | Dúnítiyá | aná | janúmíd | mún | tun |
| Per. | kunad. | Durustí | ín | búd | ki | tan wa |
| Pah. | rúban khúndí | min | júd | gaúliar | júidaí | rutaman, |
| Per. | rúán-i-khúd | az | bad | gaúhar | júdaí | kunad, |
| Pah. | 'napashman | ham | gaúhar | ham | jásúníd. | Shinaíshan |
| Per. | ba khesh-i- | ham | gaúliar | lam | dârad. | Shinásí |
| Pal | aná jánúníd | mún | pún | nadúkiya | mad jagh | múníd |
| Per. | ír búd | ki | ba | nekí | rasidah 1 | rad. |

An examination of the above and foregoing extracts will render the following opinion and conclusions of the Baron de Sacy, at least, questionable; they appear to be founded on Pársí tradition, unsupported, so far as I know, by authentic history.
" La traduction Pahlevie du livre de Calila a eu le sort de tout ce qui constituoit la littérature Persane, au temps de la dynastie des Sassanides. Elle fut détruite en grande partie lors de la conquête de la Perse par les Arabes, et sacrifiée au zèle aveugle des premiers Mussulmans; et le peu qui échapa alors à la destruction, tomba dans l'oubli et disparut lorsque la langue Pahlevie fut remplacée par l'Arabe et le Parsi." -Calila wa Dimna, Mém. Historique, p. 10.

Pure Persian, there can be little doubt, like the Arabic, in those countries where the latter prevailed, was spoken and existed as the national language throughout all Persia, for centuries before the Mohammedan conquest. Not a word of this language, it is probable, was lost at the time (A. D. 1,000 ,) when Firdaúsí flourished, whose immortal poem bears ample testimony of its richness and beauty; nor is there reason to suppose that any other tongue was spoken in the courts of the Sassanides.

The Kalela wa Damna, was translated into Arabic by Abdúllah bin Al Múqaffa; he died A. H. 137, A. D. 755 , and the language of the original, used by him, is said to have been Pahlaví; but this must be understood as referring to the same meaning of the word as that which Firdaúsí applies to it; namely, "Bástán," old Persian, and not what is now called Pahlaví by the Pársís. See Far-hang-i-Jahángírí, word "Pahalwání," "Pahlawí."

[^107]Firdaúsi having stated that tc hinı the "Pahlavi" owes the graces of eloquent composition and vigorous style, on closing his work, names the improved language " Pársí," a name appropriate to the modern language of Persia,-whether taking Arabic vocables with a sparing hand or more largely,-from that day to this.
"Base ranj burdam dar ín sal-i-sí,
" A jam zindah kardam ba in Pársí."
This goes far, I think, to prove that Pahalwání, or Pahlaví, is only another name for the Zabán-i-bástán, used, we may be allowed to conclude, to distinguish the ancient tongue from the modern language of Persia, which, without structural change, was then beginning to receive the copious accession of Arabic that has since flowed into it; enriching the language of the country by intermixture with that of its conquerors, instead of superseding or destroying it. A natural result, and, as a fact, it is strongly opposed to the hypothesis of the Baron de Sacy, touching the fate of the supposed Pahlaví, or the language of the religious books of the Pársís.

This paper is closed with a translation into Zand, by the Surat Dastúr, of the fragment of old Persian, published by Sir William Jones ; ${ }^{1}$ and an observation the value of which may be tested by reference to Kennedy's work (quoted before), whence, indeed, it is drawn.

If, as it is said, the succession of languages in Persia was Zand, Pahlaví, and Persian, is it not more than singular that the two first should be totally unlike each other, and, that more pure Persian words should be found in Zand than in Pahlaví, which it immediately succeeded? May I be permitted to add, what appears far from improbable; that the Sanskrit supplied the frame-work upon which Zand has been constructed ; whilst it is evident that, in the formation of Pahlaví, it is from the Arabic that assistance has been sought and applied, but following, particularly in the infinitive, the form of the Persian verb.

| Z. Hacha | pitaram wá | mátaram | chid | ýo | pitaram | wâ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P. Az | pid ú | mád | chi | ki | pid | u |
| Z. mátra | akhshnútú nakhushnúd | bawíti | akurzam | ahishtam |  | núid |
| P. mad |  | bíd | hargiz |  |  | na |
| Z. wíníti | píti aso | ashúni | winasim |  | mazis |  |
| . viníd; | ba jáyi | kirfah | bizah | viníd | milhá |  |

${ }^{1}$ Vol. iv. p. 306, 8vo. editiou.
Z. píti urwantim dáríti; lazislıtanim píti híchad gúnam
P. ba ázarm nek dárid; kihán rá ba hech gúnalı
Z. má záríti; húbisháwantamı darighúshim nangim ma dáríti;
P. mayázáríd; az lheshávandí- darvísh nang madárid;
Z. dátim ú windátion yo dáma patím ayútá wuhú kárim P. dád ú vindád-i- kháliq-i-yaktá bilı kár

| Z. dáríti; hacha | íristakhízim | tanú | pasínam | mast |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| P. dáríd; | az | ristákhíz-i- | tan | pasín | andeshah |

Z. numáíti; mawátá ko aslıa tanúm hawíscha dúzhag,hím P. numáyid; mabádá ki ashú tan khesh rá dúzakhí
Z. kiríti, wa tíchid píti hawístim yánítí aiba kasánim P. kuníd va anchi ba kheshtan nashaliad ba kasan
Z. ma parisindíti ú ma kiríti; wíspacha píti gít,hím P. ma pasandíd va ma kuníd; harchí ba gití
Z. arizíti aiba míníum hí padírahi aíti.
P. kúníd ba mainú az aúih pazirah áyad.

Art. XXV.—Narrative of Gaikwár Affairs; from the unpublished MSS. of the late Jonathan Duncan, Esq., Governor of Bombay, \&c., \&c., \&c.

## Introduction.

The Society is indebted to Sir Charles Forbes, Bart., for the following intercsting Narrative. It has been selected from a voluminous collection of the MSS. of the late Governor Duncan, which have been kindly entrusted to the care and inspection of the Editor, and of which a great portion, will, he trusts, from time to time, appear in this Journal. Some additional interest may perhaps attach to this narrative, from its correspondence with what has lately appeared relative to the Gaikwár affairs in the able and valuable "Dispatches of the Marquess Wellesley," compiled by Mr. Montgomery Martin.
H. H.

Pillají Gaikwár, the great warrior, a khidmatgar or menial servant of Umabáí, the widow of Dabaria Sena Patti, was the first who came to Gujarat, and conquered the country since possessed by the Peishwa and Gaikwár. Pillají had two sons and several brothers; previous to his death he divided his conquests amongst his family, allowing to such of his brothers as were living at the time of his death, A. D. 1747, the districts of Dhar, Sankira, Badurpúr or Bhaderpúr, with their respective districts, whilst on his eldest son, Damají Rao, he bestowed the government of Gujarat (i.e., of Ahmedabad) and of several districts known by the name of the Gaikwár Tallúk; and to his second son, Kanda Rao Gaikwár, he gave nine Parganahs, named Nariad, Khurry, Kaperwange, Deogaung, Balladge, Dolka, Challah, Mondeh and Matter; which partition of country it seems was confirmed by the Peishwa, and also by the Rajá of Satara, who distinguished the sons by conferring on Damají Rao Gaikwár the title of Senakhass Kheyl Shamsher Bahádur, and on Kanda Rao Gaikwár, that of Hemmut Bahádur.

These two brothers enjoyed their respective shares of their late father's conquest quietly and peaceably, and like two good friends.

Some time after the above scttlement, Damají Rao was obliged to go to Punah, and for reasons which cannot be ascertained, was under the necessity of entering into some arrangements with the

Peishwa, by which he became bound to afford the government of Punah a permanent assistance of a certain number of troops, or to pay to that government the sum of fifteen laks of rupees every year.

On this occasion Damají Gaikwár (who respected his brother Kanda Rao, as they always lived upon terms of the most intimate friendship with each other) proposed to Kanda Ran, that he should contribute something towards defraying that heavy tribute, which he very generously agreed to do; but instead of taking upon him to furnish his share of the troops, or money, he very readily ceded to his brother four of the above nine Parganahs, namely, Mondeh, Matter, Balladge and Dolka, and kept five for himself, namely, Nariad, Khurry, Kaperwange, Deogaung, and Challah, which is a district included in Deogaung, and was quite satisfied with these uncumbered districts as his share of his father's conquest.

Kanda Rao was first married to Sunderbái, the daughter of Ponwar, the Patel of Nasick, by whom he had three daughters and one son; the latter and one of the former died soon after they were born, and the mother shortly afterwards. He was then married the second time to Rajasbáí, the daughter of Moriah, by whom he had three sons (of whom Malhar is one) and three daughters, but they all except Malhar Rao and one daughter died; Kanda Rao died in 1785.

Malhar Rao was first married to the daughter of Jagade Rao Ponwar, of Nasick, who died without issue; he was afterwards married to Emnabái, the daughter of the Patel of Eulah, called Ramchandra Naik, by whom he had a son, the present Kanda Rao Gaikwár, who was born in the year 1784.

A few months after he was born, some quarrels happened between his mother and his father Malhar Rao, which by degrees rose to such a pitch that they could no longer agree together. Malhar Rao had at this time changed his conduct and mode of living, and thought of nothing but exercising his cruel disposition and intriguing pursuits. Kanda Rao and his mother were both neglected, and thrown into a room without being permitted to go out, and were allowed no more provision and clothes than what was necessary to keep them alive and to cover their nakedness.

While Kanda Rao and his mother (who lived about twelve years after he was born) were in this disagreeable situation, being close prisoners, and suffering the want of almost every necessary and comfort of life, an aunt of his, the sister of Malhar Rao, called Tackabáí, and a natural son of his grandfather, Kanda Rao, called

Christnají Rao, otherwise Apah, and Hussonbháí Borah, contributed towards his and his mother's comfort by supplying them amply (unknown to Malhar Rao) with every necessary of life.

Manají Rao, when on the masnad of Baroda, hearing of the ill-treatment which Malhar Rao inflicted on the young Gaikwár and his mother, frequently wrote to his cousin Malhar Rao, reprehending him and exhorting him to take care of them, but he paid no attention; on the contrary, following the advice of the women about him, and Pana Bacha (his Devan), and Becher Jatí, he even treated them worse; these two men and the women round him having made him believe that his son Kanda Rao was an unfortunate youth, as having been born at a very unlucky moment, and that as long as he existed, Malhar Rao would never be successful in any of his enterprises.

Manají Rao having left Baroda to go to the Játrá, or religious resort of Bechrarjí, halted on his way at Khurry. Malhar Rao, on receiving intelligence of his coming that way, went to Kalol to meet him, and brought him into the fort of Khurry, leaving all his baggage and troops in tents which had been previously pitched opposite to one of the gates of the fort called the Hanmont Gate; he remained at Malhar Rao's house twenty-four hours ; great attention was paid to him, not only by Malhar Rao and the whole family, but by all the inhabitants of the place, and Malhar Rao gave an elegant entertainment on the occasion.

During this visit Manají, much against the will of Malhar Rao, had Kanda Rao always with him, and not only reprehended Malhar Rao for treating him and his mother so very ill, but insisted upon carrying them with him, which Malhar Rao could not positively refuse, but yet did under some plea or other decline, promising, however, that they should be ready to go with him when he returned from the Játrá.

Unfortunately for Kanda Rao, his uncle, instead of going back to Baroda by the way of Khurry, took on account of some business which occurred just at that time a different route; but Manají Rao, after his arrival at Baroda, did not forget his nephew Kanda Rao nor his mother, and often wrote to Malhar Rao to send them, and it was not till he stated that he was ill and wished to see the young man, as he had with him nobody of the family who had a right to be in charge of the masnad, that Malhar Rao began to make the necessary preparations to send him; but while these were making, accounts arrived of Manají's death, which put a complete stop to Kanda Rao's being sent to Baroda.

At this time Govind Rao Gaikwár, with his sons Anand Rao and Kanojí Rao, were at Punah, and nobody but Síají Mahárájá, in whose name Fatteh Sing Rao and Manají carried on the administration of the country, was at Baroda; he was a madman, and though entitled to the masnad, was unfit to manage it or the government.

The mother of Manají, called Gungabáí, was no sooner aware that her son Manají was dead, than she dispatched an express to Kanojí at Punah, acquainting him with the death of her son Manají, telling him there was nobody at Baroda, and requesting he would set out on receipt of the express, and come there to take charge of the masnad; and Síají wrote to the same effect to his brother Govind Rao, but his despatch did not reach Punah till two days after Kanojí had left the place.

Kanojí, who had gone out riding, saw on his return home a harḱara coming in great haste; he stopped and desired his peons to ask where that harkára came from, and finding he was from Gujarat, he sent for him, and asked who he was, and where he was going; the harkára said he was from Gujarat, and was going to Punah in charge of some letters for the merchants and shroffs at that place. Kanojí was not satisfied with this answer; he commanded all the letters to be examined, and as the man did not appear to him like a common harkára, he resolved to find out who he was and who had despatched him, and from what place in Gujarat he came; and the man still refusing to declare, this increased his suspicion; he commanded the man to be seized and the stick he had to be broken, and in the hollow part of the stick he found a letter addressed to himself, containing the advice of Manaji's death, and his mother's solicitation for his coming down without loss of time.

He then took the harkára with him, and proceeded quietly to his tents, and made one of his people carry all the letters to town and deliver them according to their different addresses; and without giving any reason he divided a quantity of sugar, betel, and betelleaves amongst all his people, and went to his father's tent, where he was sitting with Raoba; after the usual compliments he was asked to sit down, which he did, and soon after he told his father that he was come to request his permission to go to Gujarat for a few days, to which both he and Raoba objected, and told him they expected shortly to return to Gujarat, and that he should go with them; Kanojí did not like this; he insisted upon his father's indulging him with his permission, but finding him averse to his sudden wish of returning to Gujarat, got up, made his salam as
usual, and said whether he was allowed or not he would go ; saying so, he returned to his tents.

All the night was consumed in concerting a plan for his leaving Punah, and at gunfire in the morning, leaving his tents standing, with all his servants, furniture, and other necessaries upon the ground, he took two of his most confidential servants and the best horse he had, left Punah and came to Dawry, where his mother was, and taking from her a rich and valuable chain, called har, and selling it there for as much as he could get, he purchased two horses, and leaving that place came direct to Darampúr, where his uncle, the rájá of that place, gave him some money, a págá, and some people, and despatched him to Songhur. No sooner had he entered the Surat Attavisse, than the people of the several districts joined and accompanied him to Broach, where he was received and handsomely entertained by Lallubáí, who gave him his págá, elephants, and some of the Arabs in Scindiah's service, and sent him to Meya Gaung, where the mother of Manají and Síají Mahárajá had sent all the Gaikwár force, with almost all the principal officers of that government, to meet and conduct him to Baroda.

He was conducted to a large house of his own upon the banks of the Sirsagar Tank, where he remained one day; on the following day he was sent for by Síají Mahárájá, who, as soon as the usual ceremony of the visit was over, placed Kanojí on the masnad of Baroda, and gave him the administration of the government, by delivering to him the sica and katar, the seal of government and sword of the state.

Govind Rao received his despatch two or three days after the departure of Kanojí, and became thereon very uneasy; upon which he went to the Darbar of Punah, and represented the death of Manají, the madness of Síají, and Kanojí's departure for Gujarat, as also the necessity of his presence there.

Finding, however, the Darbar hesitated in allowing him to go down, he prevailed upon Mahdojí Scindiah, who was at Punah at that time, to interfere between him and the Darbar, and to obtain permission for him to return to Gujarat, and take possession of his country and its government.

Mahdojí Scindiah agreed to render his friend Gaikwár this service, but on express condition that he should give him three laks of rupees, and marry his son Anand Rao to his daughter. Govind Rao had no alternative but to agree to these proposals; as there was no other channel through which he could get the difference then existing between him and the Punah Darbar settled, nor the

Peishwa's permission to assume the masnad and government of Baroda; though he did not mean to comply with the latter, indeed he could not, for Mahdojí Scindiah, though a great man, was of an inferior castc.

Mahdojí Scindiah interfered and settled all the differences on as favourable terms for his friend Govind Rao as it was possible, and obtained the Peishwa's permission for him to leave the country, and to resume the masnad and government of Baroda on his arrival there, and also prevailed upon that court to despatch him with every honour due to his person and rank.

Govind Rao accordingly left Punah in great triumph, and came to Dawry, where Mahdojí Scindiah insisted upon the three laks of rupees being paid to him, and the marriage ceremonies as agreed upon being performed. Govind Rao had not at that time the means of complying with the former, but he resisted the latter, saying that his daughter was not of the same caste, but that on his arrival at Baroda he would consult the family, and determine finally on that point. Mahdojí Scindiah immediately suspected his intention, and prevailed upon the court of Punah to prevent his leaving Dawry until he paid his three laks of rupees, and the first instalment of his agreement with the Darbar; Govind Rao was accordingly stopped there a long time.

Govind Rao had no resources at this time, and did not know where the money could come from ; however, he know that Kanojí was upon the masnad of Baroda, and was determined to, try whether he would do any thing for him.

He accordingly wrote to Kanojí explaining the situation he was in, and requesting he would assist him with tents and other necessaries to enable him to come down and enter Gujarat with credit; and also with cash to meet Mahdojí Scindiah and the Peishwa's demands, and saying that unless they were satisfied, he could not descend the Ghauts nor come to Baroda.

Kanojí on receipt of this letter began preparing the tents and other necessaries, as also some troops, cattle, elephants, camels, \&c., and such money as he could at that time command; and having demanded of Síají Mahárájá his assistance to complete the sum he wanted to remit to his father, he refused, saying that he had put him upon the masnad, and that if money was wanted, he might open a loan and borrow from the merchants; that he would not consent to his touching the jamdar khana, or treasury.

After this refusal a quarrel ensued between Kanojí and Síájí Mahárájá, and they turned their guns and troops upon one another,
and began firing; this continued for a week, when some respectable merchants and officers of government interfered and settled the quarrel.

Kanojí, however, got a considerable sum of money, some say fifteen laks, others say twenty, whether from the jamdar khana or from the shroffs was not known, but he certainly sent his father a vast number of tents and supplies of camels, bullocks, elephants, and people, and a very large sum of money under a strong escort. Govind Rao was rejoiced at that necessary and timely supply, and on receipt thereof he paid the Peishwa's and Mahdojí Scindiah's demands, and leaving Dawry, came to Songhur, where he was joined by all his people, and came to Gujarat, accompanied by them all, and went direct to Mastú Bagh, and wished to make his entry into the fort; but Kanojí sent to request he would stay where he was until he came to conduct him into the fort; these events took place February, 1794.

Kanojí keeping in the fort for his guard two thousand Arabs and six hundred Patan horse, sent all the rest of the Gaikwar's force, horse and foot, to attend his father and to be under his order at Mastú Bagh.

About ten days afterwards Kanojí, without previously acquainting his father with his intention of paying him a visit, went to Mastú Bagh, accompanied by four hundred of his choice Arabs, and presented himself to his father, and surrendering him his sword and target, sat down about a quarter of an hour, and asked his permission to go and pay his respects to his mother; he went accordingly to the zanána, but instead of returning after seeing her, he went directly to the fort; this created some suspicion in the mind of the father, which was increased by the intriguing people round him.

Govind Rao, knowing that Kanojí was not to be depended upon, and suspecting that he might play some of his tricks against him, begun soliciting and securing the interest of all the troops he had out with him at Mastú Bagh, and particularly the Arab jamedars and other officers commanding the several detachments of horse and foot, and by dint of bribes and promises brought the whole of them over to his interest, so that Kanojí remained only with his bodyguard, consisting of about four hundred Arabs, the jamedar of which was bribed, and confederated with the rest in favour of Govind Rao.

Every thing being thus arranged for seizing Kanojí, Govind Rao, four days after the visit which Kanojí paid him, entered the fort, went to the palace, called the Badur, and assumed the masnad of Baroda. Kanojí was at this time in Fatteh Sing's large house in
town ; his own body-guard confined him in that house, and he was afterwards by his father's order placed in the upper story of the house under a very strong guard; every communication was prevented, and nobody except the servant who attended him was allowed to have access to him.

Kanojí being thus imprisoned, Govind Rao took possession of the masnad, and commenced his government; he was fond of Kanojí, but, although very intelligent, and a priuce possessing both understanding and resolution, he was, by the continual insinuations of the people around him, made doubtful of his son's attachment, and suspicious of his fidelity; although his recent behaviour in supplying him so amply with the means of satisfying Scindiah and the Peishwa, and of thereby coming to Gujarat, had pleased him much, he still suspected him, and the ministers, whose interest it was that the father and son should not be on good terms, took care to poison his mind against Kanojí. They were aided in this by the intrigues of the women, particularly of the widows of Fatteh Sing and Manojí, who on their congratulatory visits to Govind Rao while in Mastú Bagh, had said all they could to prejudice him against Kanojí, because he had not only curtailed their allowances, but taken some of the money (to which they had no right) to complete his remittance to Punah, and to pay the troops, who were greatly in arrears.

This, together with his own doubts as to the sincerity of Kanoji's attachment to him, made him seize and keep him as a state prisoner in the manner above stated.

A month had scarcely elapsed when Kanojí found means to get some women's clothes, and putting them on, got down by the back door, and went out of the fort by the Larepore gate to the house of a fakír called Shah Vazass, whence he sent to tell Nana Raut to send him one of the best horses in his father's stables with which he readily complied. No sooner had he got the horse than he left the fakír's house, and directed his course towards Sankera Bahádurpúr, halting on his route at a place called Padreah Bomareah, a Movass village, where he assembled as many Bhíls and Collies as he could, and began annoying the parganah of Sankera Bahádurpúr, till Gunput Rao, tired of his losses under the constant depredations committed by Kanojí and the Bhíls he had entertained, wrote to Govind Rao, acquainting him with the circumstance, and requesting he would settle the difference betwcen him and his son Kanojí, and carry him to Baroda. Govind Rao, on receiving this intelligence, detached Sidi Omer, a chella of the late Manojí, and Harry.
bháí, one of the Gaikwárs commanding a págá, with a small force to apprehend him; they met at the place callcd Padreah Bomareah, and Kanojí engaged them, but was unfortunately for him defeated, and obliged to fly to the thickest parts of the hills of Sat Patti, inha_ bited by the Bhíls and Collies. Govind Rao's force followed him a little way in hopes of coming up with him, but returned to Baroda unsuccessful.

While on the hills of Sat Patti, without the means of existing or satisfying his followers, he met a Banian who had come from the Dekkan with a large assortment of piece-goods by that route, and was going to Baroda; from this Banian he purchased a lak of rupees' worth of piece-goods, and divided the greatest part thereof amongst his followers, and applied the rest to his own use. As soon as the time agreed on for payment was expired, the Banian began importuning him for his money; he always put him off from time to time, till the Banian was quite tired, and spoke to him in a manner rather disagreeable, upon which he told him in plain terms that he could not pay him, not having command of moncy, that he should either wait till he got some from some plunder or other, or take a bill on his father Govind Rao, and run the risk of its being paid or not; the poor Banian hesitated a long time, till at last he preferred a bill upon Govind Rao Gaikwár, having no alternative.

The poor Banian accordingly took the bill and came to Baroda, where he presented it to Govind Rao, who refused to accept it; this, however, was no disappointment to him, as it was an event which he expected; he went with this bill to all the principal bankers in the place, and particularly Mungul Sakidass, or Mungul Parik, who was in Govind Rao's confidence, and acting as his confidential dewan, while Raoba was that of government. These people advised the poor Banian not to discount the bill as he intended, but to hold it, and that they would endeavour to get him his money.

These Banians being all men of wealth and influence, and both Govind Rao and Raoba depending on them for the supplies of cash for the exigences of the state, they repeatedly addressed both Govind Rao Gaikwár and Raoba, concerning this bill, and showed the necessity of discharging it. The bill was some short time afterwards discharged, and the man went to his country quite satisfied, although with the loss of interest for near twelve months.

The moment Kanojí heard of his bill being paid, he descended the hills of Sat Patti, and came to Dakur, annoying and plundering the country, and levying troops as he went along; he reached

Pittapur by the way of Lonawarah, and went thence to Khurry ; at this time he had about two thousand Arabs with him, besides other followers. He stopped at some distance and acquainted Malhar Rao with his arrival, who instantly sent people to invite him into the fort. Kanojí knew his relation too well to trust himself in the fort without a baindery, or security. Bowanbháí, Malhar Rao's brother, was given as a security, who pledged himself for his safety in case of any disagreement between him and Malhar Rao. Kanojí accordingly was conducted into the fort, and lived at Malhar Rao's house. His troops were left out of the fort at a distance of two miles. Malhar Rao, apprehensive of some force from Baroda coming against him, entertained Kanojí and all his force in his service; having at this time a small body of horse and foot, and some síbandy Sepoys.

Govind Rao, as soon as he came from Punah, and resumed the masnad of Baroda, wrote to Malhar Rao, complaining of his not having come to meet him on the road according to custom, and inviting him to Baroda. Malhar Rao declined the invitation, suspecting, and with just reason, that Govind Rao would call him to account for attempting to marry his daughter, by a Gujarat girl, to Bapker of Lony, a man of high rank, and of the same family and country as the Gaikwars, and also for the arrears of Peishkush, which Fatteh Sing had unjustly established, and exacted, and which he had not paid since his death, nor was it demanded by Manají. He did not choose to pay it to Govind Rao Gaikwár, because his father Kanda Rao was ruined by Fatteh Sing, who drove him out of Nariad, and established this Peishkush, or tribute, for no other reason than because Kanda Rao gave Govind Rao every aid and assistance in his power to fight Fatteh Sing, and afterwards sheltered him at Nariad, and went with him to Ahmedabad.

The cause of Fatteh Sing driving Kanda Rao from Nariad, and establishing the Peishkush payable from Khurry every year, was that when Govind Rao came from Punah with troops that he had levied on his way down the Ghauts at Songhur, and in Surat Attavíssí, with the view of dispossessing Fatteh Sing of the masuad and government of Baroda, Kanda Rao aided and assisted him in his project, not only with large loans of cash, but with seven or eight thousand troops, horse and foot; he also went himself to conduct his ncphew Govind Rao, and on the first attack defeated Fatteh Sing, who was obliged to retreat and shut himself in the fort of Baroda till he had levied troops enough to attack them both; in the first attack he was so successful as to disperse them
and all their troops; Govind Rao and Kanda Rao deserted the field and went to Nariad, and thence to Ahmedabad, where Kanda Rao supported Govind Rao at his own expense, till the Peishwa's troops came in search of Ragonath Rao, when Govind Rao found his way back to Punah. Kanda Rao remained at Ahmedabad till the matter between him and his nephew Fatteh Sing was settled; he then returned to Nariad, and there he remained quiet.

Fatteh Sing, who could not forgive Kanda Rao for his behaviour in favour of Govind Rao, soon drove him out of Nariad, sent him to Khurry, and as a fine, established and exacted from him the Peishkush, which Malhar Rao did not pay to Manají, nor was it demanded during his government. Malhar Rao was in great hopes, that when Govind Rao came to the masnad of Baroda, he would not only return Nariad, remit the Peishkush, and pay the expense which Kanda Rao had been at in aiding and assisting his causc, but that he would give him some remuneration for his attachment and friendship; but he was disappointed; for instead of doing all this, he retained Nariad and insisted on the payment of the Peishkush, and many other things in which he ought not to have interfered.

This and many other circumstances hereafter detailcd was the cause of Malhar Rao resisting the payment of the Peishkush, and going to war with Govind Rao the first time, and if Ismael Beg had joined him he would have certainly taken the whole country, and Baroda also, as was his intention.

While they were corresponding on these and other subjects, Govind Rao Gaikwar received intelligence of the arrival of Bapker, the intended son-in-law of Malhar Rao, at Jambusir, upon which he (Govind Rao Gaikwár) sent several detachments of his troops under the command of their respective officers, namely, Sidi Omer (the chellah of the late Manají Rao), Amin Saib, Sevaram Gardy, and Naran Rao Pandriah, with orders to proceed in several directions (as they could enter the Peishwa's district), and that when Bapker left the place to cross the Myhe, to attack, plunder him, and to put him to death if he resisted. Bapker fortunately received this intelligence in time to make his escape to Surat, from which place he wrote to Malhar Rao, who recommended his coming by water to Baunagur, where he would have a strong party to escort him to Khurry by Limri, which was accordingly done, and Bapker joined his intended father-in-law safe at Khurry.

This raised Malhar Rao's anger and his suspicion of Govind Rao Gaikwar's intention; he became apprehensive that he would certainly
call him to account for giving shelter to Kanojí, for acting as he did with respect to Bapker, and declining the payment of the Peishkush; he accordingly determined to oppose any force which he might send against his fort, and for this purpose he wrote to Neyeff Khan, and Ismael Beg, at Joudpúr, to come to his assistance with about twenty thousand Patans, saying that he would pay them handsomely, and he also gave Kanojí instructions to augment his force, and he himself begun to enrol Arabs, Scindians, Patans, Pardessís, \&c., and made between him and Kanojí upwards of ten thousand horse and foot of the best that could be got, and prepared to give any force which Govind Rao Gaikwár might send, a warm reception.

Govind Rao Gaikwár hearing all this, wrote him, in express terms, to suspend the marriage of his daughter with Bapker, to seize and deliver up Kanojí, and pay the arrears of the Peishkush; and that if he did not comply with all this, and did not give good and sufficient reason for levying new troops, that he would send a force to raze Khurry from its foundations, and seize him and all his associates.

Malhar Rao received this letter, and after considering his cousin's demands, wrote to him for answer, that he would do neither, and that he might send his force to reduce Khurry whenever he liked, as he was ready to receive them and prevent any mischief they could do.

No sooner had this letter been sent, than Malhar Rao began to levy more troops, and to put them in a perfect state for meeting and opposing the troops of his cousin when they should come, and made every preparation he could for a vigorous defence.

Govind Rao Gaikwár, on receipt of such an unexpected answer, desired Raoba to send a strong force to reduce Khurry and seize Malhar Rao and Kanojí.

The troops were accordingly got ready; Múkund Rao was appointed commander in chief, Govind Punt Mama, to the office of Sar Nobat, or Faujdar, and sent with them Mír Gossan, Mír Khamaluden Khan, Sevaram Gardy, Amin Saib, Karan Raw, and Jagadi Rao Pandrah, Garguiah, Gorforch, Nombalkar, Abúd Mana, and several other Arab jamedars, with their respective detachments of horse and foot; with Huzúr, and all other Págás, amounting altogether to near twenty-five or thirty thousand troops, including the force from Gujarat.

This force took a long time in preparing. However, they left Baroda in several small detachments, and went to Ahmedabad, by
the way of Nariad, and, after crossing the Saber, they stopped at a place called Kalli Kotte, and there they remained some time till all the detachments had joined, and then they commenced their march towards Khurry ; as they went on, they razed the Thana, or Chowkey of cvery village they came to, till they came to Kalol; the Tandar, or officer of the chowkey at that place, made his escape, and went to Malhar Rao, to whom he reported the approach of Govind Punt Mama's force.

Malhar Rao, at this time, was at Adulhage with the best of his troops, in hopes of intercepting Govind Rao's force, having been told that Govind Punt Mama intended to take that route from Kalli Kotte; but on receiving intelligence of their having gone the other way, and reached Kalol, he left Adulhage, and by forced marches, went to Khurry, and there remained quiet till Govind Rao's furce advanced to a place called Kand, about two miles from the fort, when Malhar Rao, Kanojí, with the best of his horse and foot, and all the Arabs, commanded by Sultan Jaffer and his brother Bader, made a desperate attack, in which Govind Rao's force was defeated, and obliged to retire to Kalol; from whence, after three or four days' rest, he marched in the other direction round the fort, and came to a place called Kúndal; he there took post in a valley, and on the following day marched towards the fort, with the view of attacking it, when Sultan Jaffer, Bader, his brother, and several other Arab Jamedars, with Kanojí, Hanmont Dewrao, Trembuck Rao, Namo Pindara, Sheikh Abúd, the Jamedar of Pattan, with all the Scindians, Purbias and Pardesses got out of the fort, and made another desperate attack which lasted till the afternoon; in this grand attack Govind Rao's force was again defeated, and Mír Gossain with great difficulty could save his guns. In this action Kanojí, who had the arrangement of it, gained great credit; he himself fought like a brave man, and conducted the whole action in such a masterly manner, that the number of killed and wounded of Malhar Rao's army was about two hundred and odd, whilst that of Govind Rao's army was upwards of four hundred, besides horses, bullocks, camels, and one elephant, and managed to close the action by taking the Baroda Zarí Patká, the standard of government.

Mír Gossain, disappointed at this ill success of Govind Rao Gaikwár's force, proposed to Govind Punt Mama, that they should both go round the fort, to take a view of all the ground, and choose a convenient spot for erecting their batteries, and attacking the fort at once. This was agreed upon, and on the third day of the second action, they accordingly went round, and pitched upon a large sandy
hill, whieh eommanded the fort. This hill was between two villages, one called Ardasser, and the other Azandrú, quite elose to the fort. He prevailed upon Govind Punt Mama to move the whole army to that plaee, whieh was perfeetly sheltered from the guns of the fort, and promised to reduce it in four days, if he gave him people and assistance to plaee his eight guns on the top of the hill, which was readily complied with. The troops left Kíndal, and eame to Ardasser ; every thing that Mír Gossain asked was duly given him, and the guns were aecordingly placed on the top of the hill. No sooner had this been done, than Gossain opened his battery, threw several shots into the fort, and dismounted one of the guns, from Malhar Rao's battery ealled Merah Ghur, whieh played upon the village of Ardasser, though with little effeet. Malhar Rao was frightened at this ; he thought he should not be able to defend mueh longer his favourite fort of Khurry, and was determined to push with all his foree, and attaek that of Govind Rao Gaikwár at the village of Ardasser, when a French officer, whom he had in his service, told him to order two great guns to be placed on the top of another high hill, immediately at the baek of the hills where Gossain was with his guns, and to keep all his horses in readiness to charge in different directions the moment Gossain's fire ceased. Orders were aceordingly given, but Malhar Rao was so eonfused, that notwithstanding the French offieer's adviee, he went to the battery, got the gun-carriage repaired, remounted the gun that was dismounted, and kept firing merely to show he kept up a constant fire. The Freneh officer, who was called Monsieur John, went upon the hill, opened his battery of two guns upon Gossain, and direeted his fire with such judgment and sueeess, that Gossain was soon obliged to cease firing; the moment that was perceived in Malhar Rao's eamp, the horses advanced in different direetions, the foot followed, and under Kanoji's direetion they eharged, and attacked Govind Rao's army with such suecess, that it was completely defeated, and obliged to retire to the other side of the same village, leaving their tents, baggage, \&e., upon the ground, the greatest part of whieh, and the guns, were carried off by a party which had returned in time to save them, but it eost them the loss of many lives, and among them those of their very respeetable* sardars, Karan Rao and Jagadi Rao Pandrah. Malhar Rao also lost a great many people, and some of his best offieers, amongst them Namo Pindara, Lateff Khán, and Hussen Khán, the two Pattan Jamedars. Kanojí, on this oceasion, made Monsieur John a present of a pieee of jewellery whieh he always wore about his neck, called hár.

After this great defeat, Govind Punt Mama with his whole force retreated to the further end of the village Ardasser, and remained there waiting it was supposed for orders from Baroda.

No sooner had this victory been gained by Malhar Rao, than, instead of being grateful to Kanojí for his great cxertion in favour of his cause, he began to be suspicious and afraid of him; and Pana Bacha, and Becher Jattí, who did not like Kanojí, took this opportunity of poisoning Malhar Rao's mind against Kanojí, by saying all they could to his prejudice, inspiring into the mind of Malhar Rao, that he was a bad man, though a great warrior, and that from his late success, all the troops had a great opinion of him, and that they would not be surprised if one day or other, with the assistance of these very troops, he made himself master of Khurry. This, by degrees, operated so strongly on Malhar Rao's mind, that he was afraid of Kanojí, but did not know how to get rid of him ; these people finding that Malhar Rao hesitated sending Kanojí away, forged a letter to Govind Punt Mama, as if it had been written by Kanojí, giving an account of the strength of the fort of Khurry, and of Malhar Rao, and advising him to come on, and that he would contrive to keep one of the gates open for him, and that he would take care that Malhar Rao's troops should make no resistance.

This letter was intercepted and presented to Malhar Rao, upon which he gave full credit to every thing that was said to him against Kanojí as the latter was at this time in the fort of Khurry, without any more assistance than that of his domestic servants and a few sepoys, a plan was laid by Malhar Rao at the suggestion of his friends and associates, to seize and put Kanojí to death.

Kanojí hearing of this, immediately wrote to his people to bc upon their guard, and to be in readiness to obey such orders as he might send ; but being in the fort, and not able to avail himself of their assistance, he fled from the house where he lived, to the house of his security, Bowanbhái, the brother of Mallar Rao, and remained there.

Malhar Rao insisted upon his being given up, which Bowanbháí refused, saying, that as long as his security lasted, he would not give him up; he then insisted upon his turning him out of the fort, which Bowanbhái readily agrecd to do, on the terms of the securitybond, which werc, that in the event of any dispute happening between them, he was obliged to sce all their accounts settled and paid, and conduct him safe, with all his troops and baggage, to any place ten koss distant from Khurry.

Some disputes arose between Malhar Rao and Kanojí, concerning the payment of the latter's old and new levies, which was however settled in the best possible way. In the course of the settlement of these accounts and differences, some disagreeable words passed between Kanojí and Malhar Rao, and the former told the latter, that he would at this time close all accounts with him, but that if he ever succeeded to the masnad of Baroda, or got the means of having a force at his command, the first thing he would do, would be to reduce Khurry, and that if he caught him alive, he would cut him to pieces; and saying so, he came out of the fort, accompanied by Bowanbháí and his troops, and went to Kampurah, where he was received by Bhugat Sing, the Takír of that place, who entertained him and all his troops for four days. On the fifth he left that place, and avoiding his father's territories, went to Veremgaung; all the petty Princes, Takúrs, and Rájás, in the way as he passed, made him presents of money, according to their means. The Dessoy, and other people at Vercmgaung, made him also presents, and entertained him for the few days he remained there.

At this place he sold all his jewels, and with some money he had, he managed to pay his people, and discharged them all, except a few choicc sepoys, and about two hundred of his best horse.

Fron Veremgaung he went to Sumá Razanpúr, where he remained a few days, and thence he went to a place called Dantah, till he obtained the permission of Holkar and Scindiah's people to enter Malwa with security to his person; he went direct from thence to Ougein; as he went from village to village he was entertained on account of the Sirkar, and people made him presents, which afforded him the means of living and defraying the expense of his followers. From Ougein, he passed by the way of Dhar, the country of one of his relations called Ponvar, and came to the hills of Raz Pimpla, on the Movass part of it, where he remained.

The people at Baroda some time after, having reccived intelligence of this, despatched Narú Serput, and Sidy Amber ; (this last was the Chella of Salle Chillaby, at Surat ; since leaving his master, he had become an intriguing officer, and was employed in the service of the Gaikwar ;) men on whom Kanojí placed some reliance ; they went there, saw him, and used every argument in their power to persuade him to return to Baroda, in which case they promised him that his father would receive and use him well, and their interest should be used with his father to give him some employment. Kanojí, too, was tircd, and all his means of living and entertaining
troops any longer were exhausted ; rather therefore than perish in the jungles of Raz Pimpla, he determined to return, and accordingly, accompanied these two men, and came to Baroda; but no sooner had he arrived there, than he was carried to a large house upon the banks of the Sirsagar Tank, and confined there under a strong guard.

When Malhar Rao Gaikwár wrote, inviting the Nabob Neyeff Khan, or otherwise Ismael Beg, with twenty thousand Pattans, he had in view, after the defence of Khurry, to attack and destroy Govind Rao Gaikwár's force, and then, joining his and Kanojí's force to the expected reinforcement, to annoy, plunder, and take all the territories of his cousin Govind Rao, and to reduce Baroda if possible: he had also in view the reducing of all the petty Princes, Rájás, and Takúrs, and making them tributary to him. He meant to keep Baroda and the best of the territories under it to himself, and to place Kanojí at Pattan, and Ismael Beg at Pallanpore ; the latter was to share one half of all reduced countries, and Malhar Rao was to keep for himself the other half.
… He expected Ismael Beg would, from the letter requesting his assistance, reach him previous to the approach of Govind Rao's force, and often regretted his not having arrived, or even written to him acknowledging the receipt of his letter; while in this state of suspense respecting the expected assistance, Govind Rao's force arrived, and he was fortunate enough to beat them twice; immediately after the second action at Kúndal, he received a letter from Ismael Beg, saying he was ready to come with twenty thousand choice Pattans, but that they would not leave their country without some money in advance. Malhar Rao instantly wrote to him that he might set out for Pallanpore, where he would meet with Sheikh Abúd Jamedar, who would be despatched in a day or two with money, and that he would meet with provision and other supplies at every stage; he accordingly despatched Sheikh Abúd Jamedar the very next day, with money and credit to the amount of a lak and sixty thousand rupees.

After the despatch of Sheikh Abad to await the arrival of Ismael Beg at Pallanpore, Govind Punt Mama was determined to attack Malhar Rao's force and the fort of Khurry again, which he did, and was again completely defeated, as stated in the account of the action already given; being thus defeated the third time, he retreated with his whole army to the furthermost end of the village, and took post there, and it was supposed he wrote to Baroda for fresh orders and reinforcements.

Meanwhile intelligence arriving from Bessanaghar, that Ismael Beg, from Joudpur, was advancing quickly with some Pattans towards Pallanpore, Govind Punt Mama, supposing this was the reinforcement expected by Malhar Rao, left his army at Ardasser, took ten thousand horse and foot with him, and went to Bessanaghar with the view of intercepting them as they passed that place. But hearing that the reinforcement consisted of twenty thousand choice Pattans, he remained at Bessanaghar, informed the government of Baroda, and requested their assistance.

Ismael Beg arrived at Pallanpore, received the money and the credit, divided the same amongst the troops, and wrote to Malhar Rao, that he required more money and a large supply of provision and other necessaries, as his people from being in want of money and provision were sick and mutinous, and were deserting fast. Malhar Rao at this time had beaten Govind Rao's force three different times ; the fear which he had on its approach was all over, both his treasury and credit were exhausted, and he had no immediate means of raising either money or credit. He therefore wrote to Ismael Beg, that he was endeavouring to raise the means of sending him some money and provision, but that in the mean time he might send a party of horse with direction to take and plunder Seidpúr, that it was a large fertile and rich country, and would afford him plenty of money and provision for all his army. Ismael Beg took the advice, and went there accordingly with a detachment of five thousand horse, and as he approached near the place, a Brahman, an old inhabitant of Seidpúr, after taking a full view of his party, went to Bessanaghar, reported the same to Govind Punt Mama, and prevailed upon him to attack them by surprise, promising, at the same time, to get all the country people and the Kúlies to join him. Trusting to the Brahman's information, and his influence in the country, Govind Punt resolved to follow his advice, and marched accordingly; on coming near, Neyeff Khan sent to inquire who they were, and was given to understand they were Malhar Rao's troops, coming from Khurry with money and provision, which prevented his collecting his small force, or taking any steps for resisting his enemy. He was shortly after taken by surprise, and his camp plundered and destroyed. Retreating with about one thousand horse and followers, accompanied by his friend Sheikh Abúd, he reached Pallanpore, whence he went with all his people to Batty, and from thence to his own country.

The account of this great success having been received at Baroda, Govind Punt Mama was ordered to return to Khurry, and to endea-
vour to take it, and all the officers of the Baroda force were directed to use every exertion in their power to enable Govind Punt Mama to comply with the wish of government. On his arrival, operations again commenced, but before they came to anything serious, Malhar Rao, sensible of the loss of Kanojí, and finding that the hopes of assistance from Hindostan had all vanished, and that his own force alone was not able to contend with that of Govind Rao Gaikwár, resolved upon making peace.

Negociations were opened for that purpose, and Shahamut Khan, Kassim Khan, and Khamaladin Khan, were deputed to treat on the part of Malhar Rao with Govind Punt Mama, but nothing decisive or final was concluded. Husson Borah was then employed. He very wisely went to Govind Punt Mama's camp, and told him that as he was going to Baroda to negotiate a peace with Govind Rao Gaikwár, he (Govind Punt Mama) should move with his army to Minda Adulhage, and remain there until his (Borah's) return, and that Malhar Rao should remain quiet in his fort; this was accordingly agreed upon.

Hussonbháí Borah then went to Baroda, saw Govind Rao Gaikwár and Raoba, and was so successful, that on his third meeting he concluded the peace, on the following conditions:-

1st. That Malhar Rao should remain in quiet possession of Khurry, Kaperwange, and Deogaum.

2nd. That Malhar Rao should instantly pay to Govind Rao fifty thousand rupees, and five laks of rupees to the Sirkar, as follows: namely, two laks and fifty thousand rupees in a month or six weeks from the date of the treaty, and the remaining two laks and a half in two years, by equal instalments of one lak and twenty-five thousand rupees a year.

3rd. To pay regularly after the date of the treaty every year, one lak and fifteen thousand rupees, as it was settled by Fatteh Sing.

4th. That as soon after the rains as possible, Malhar Rao should come to Baroda to pay his respects to Govind Rao Gaikwár. Seid Múlakella, Manor Punt Nana, Vajnauth Pandit, and Vakatsawsct, and several other persons were the guarantees of the said treaty of peace, as well as of the due performance of its several articles.

As soon as the treaty was made, signed, and ratified, which was in May or June, 1794, the troops were all ordered back to Baroda; and Malhar Rao, after the dassarah in the month of October following, went to Baroda and paid his respects to his cousin, Govind Rao Gaikwár. He was well received and entertained agreeably to his
rank, and all the men, women and children of the family were happy to see him. Govind Rao invited him to stay a little longer, but he, suspecting some treachery, was not happy till they allowed him to return to Khurry, nor till he was many miles on his way thither.

Malhar Rao continued very friendly and peaceably till the year 1799, when his mother, Rajasbái, died, and about six months after, his own wife, the mother of Kanda Rao, died. After the death of these two persons, Malhar Rao altered his conduct again, took the administration of the affairs at Khurry from Husson Borah and Christna Rao, and gave it to Pana Bacha and Becher Jattí, and at the instigation of these two men, both Husson Borah and Christna Rao were confined, and he began his old behaviour again ; but with the government of Baroda he continued very friendly, and paid his Peishkush regularly.

After the conclusion of the peace above-mentioncd, Raoba went to Punal, on the concerns of the government, and on his return from thence in the year 1797, he was the means of procuring for Aba Silokar the mamlet or revenue administration of the Peishwa's share of Ahmedabad, and brought Silokar with him; this man behaved remarkably well one year or thereabout, but afterwards he bcgan annoying the Gaikwár and his country in such a manner, that Govind Rao was obliged to go to war with him, which commenced about the middle of the ycar 1799; at this time Malhar Rao had made over the management of Khurry to his son Kanda Rao, in whose name all sanuds and other papers were made, and Malhar Rao remained simply with the administration of the revenue and government.

Malhar Rao's motive for putting his son upon the masnad of Khurry, notwithstanding the ill-will he bore him, was, first because he was his son, and also because his father, Kanda Rao, had put him (Malhar Rao) upon the masnad of Khurry at the age of sixteen, and he himself was always out in the parganah, and in command of his small body of troops, and went once a year on Mullukguery collection. Malhar Rao wished to follow the same plan, and young Kanda Rao had no sooner attained the age of sixteen, than be put him upon the masnad, and kept himself disengaged to manage the revenue business, and to command his troops; besides this he had another reason, which was the disturbances at Baroda, for had Govind Rao Gaikwar put any of his sons on the masnad during his life, so many changes and revolutions would not have taken place; this he wished to avoid, and as the masnad of Khurry, and all the country attached to it, being hereditary estate, would have ultimately
fallen to Kanda Rao, he chose to see this business properly settled in his life-time. But though the affairs of Khurry were managed in Kanda Rao's name, yet he was not regularly put upon the gaddí till after the death of Govind Rao, in the latter end of October, or beginning of November, 1800. On this occasion all the guns of the fort and army fired; notice was given to all the neighbouring chieftains, and all the officers of government and army, together with the Patels Dessoy,. and the merchants came and made him the congratulatory salam and nazar.

When Raoba went against Ahmedabad, Govind Rao made a requisition, requesting Malhar Rao to aid and assist his expedition with such troops as he could spare, on which occasion two Págás were sent, one of Kanda Rao, and the other of Malhar Rao, with Kanda Rao's Zarí Patká, and they remained there until Silokar was seized, and Govind Rao's force left Ahmedabad for Baroda.

However bad the conduct of Malhar Rao might have been in other cases, his whole deportment with respect to the Baroda government till this time, was uniform and proper, although he hated Raoba and his caste.

While Govind Rao's force was contending with Silokar at Ahmedabad, he was taken ill; from day to day he grew worse, and soon after he heard of Raoba's success in reducing the fort of Ahmedabad, and taking Silokar a prisoner, he wrote to him to return with all possible haste, but before Raoba entered the town, Govind Rao was no more.

It is said that Govind Rao, a few minutes before his death, called Kanojí three or four times, and finding he was not there, said, "Why don't you send for Kaniah ;" (the name by which he used to call him.) Mungal and Sanval Pareks, who were present, said he was coming, and they went down below where Anand Rao was, and brought him; when Govind Rao said, "Why have you brought Anaba; where is Kaniah ?" they replied, "He is coming, but Anaba is here, you should place him in the masnad, and deliver him the sika and katar." He was then at the point of death, but was able to say, "Very well," before he died. Anaba was accordingly proclaimed the rája of Gujarat, and next morning the remains of Govind Rao were burnt according to custom.

On the seventh day after the death of Govind Rao Gaikwar, Kanojí, confederating with some of the Arab Jamedars, took an Arab dress, and bribing the guards as he went along, found his way to the palace ; and between eight and nine o'clock at night he went up where his brother was sitting, made his salam, and stood before him.

Anand Rao looked at him with astonishment, and asked him, " What, Kaniah, are you come?" he answered, "Yes." "Well," said Anand Rao, "sit down." No sooner was he seated, than Anand Rao sent for the Sika and Katar, and said "Take this." Kanojí wanted nothing clse, he received them with pleasure, and immediately gave orders to secure the gates, and the next morning made all his arrangements and commenced his government. Raoba was at this time at his house in Ras Purah; he kept him there taking no notice of him, and appointed his brother Babají his karbary, and began calling every body to account, fining some and confining others, which disgusted every body and put them upon their guard, to devise means to overthrow him.

Kanojí, immediately on his assuming the masnad of Baroda, wrote to Malhar Rao, putting him in mind of his treatment at Khurry, the manner in which his account was settled, the arrears of Peishkush since he last paid it to his father Govind Rao, and saying that if he did not satisfy all these demands, he would send a force to reduce Khurry and bring him to Baroda, where he would cut him to pieces, according to the promise he made on leaving Khurry.

This message seriously alarmed Malhar Rao, as he knew Kanojí was capable of executing his threat. He directly wrote to Raoba, expressing his concern at Kanojí having assumed the masnad and government of Baroda in the place of Anand Rao, who was entitled to it, and that he was surprised that a faithful servant like him could suffer it without taking some steps to prevent it, and to put Anand Rao upon the masnad, and that if any assistance was required he would give all in his power.

This was not all, but apprehensive of his letters being intcrcepted, he sent a Vakíl of his to be at Baroda, to communicate to him every event which took place, and inspire in the mind of Raoba and other officers of the former government, the necessity of dispossessing Kanojí of the masnad, and placing Anand Rao upon it as the rightful heir, being Govind Rao Gaikwár's eldest and legitimate son.

Had Kanojí conducted himself with moderation, and endeavoured to gain the good-will of those who had always been about his father, and those who were in his confidence, particularly the two Banians, Mungal and Sanval Pareks, who were always considered as the support of government, and had called in Raoba, and conferred the administration upon him, Anand Rao would have remained where he was, and Kanojí would have been on the masnad till this day; but he never ceased tyrannically seizing upon innocent people, putting them in irons, and fining them large sums of money; this gave a general
disgust, and caused such a terror in the country, that no one thought himself or his property safe while this man was on the masnad, and people began to join and confederate together to devise a plan for seizing and confining him.

Malhar Rao also was continually importuning Raoba by his Vakíl, and by letters, offering assistance if necessary. His first view was to prevent Kanojí sending a force against Khurry, which he certainly would have done if he had continued on the masnad of Baroda. His next view was, if Raoba succeeded, to get Nariad back, and the Peishkush remitted, as the one was taken, and the other established by an arbitrary act of Fatteh Sing, merely bccause his father, Kanda Rao, gave shelter to his nephew, Govind Rao Gaikwár, and afterwards fitted out an armament, and went to Govind Rao's assistance against Fatteh Sing; his ultimate view was, by Anand Rao being placed on the masnad, to become one day or other entitled to the masnad of Baroda, either on failure of his having a son, and young Fatteh Sing dying during his minority, or as Anand Rao was a man of weak intellect, to excite through some quarrels the women (who were not fond of the then administration) when he would perhaps be able to step in, to look after the interest of his foolish relative, and bccome master of the country.

It is supposed that Raoba had made, through his vakíl, some kind of promise to induce him to hope that he would, if he succeeded, restore Nariad, and remit the Peishkush.

Kanojí reigned four months, at the end of which he was seized, and confined in the fort of Kanapár. Anand Rao was put upon the masnad, and Raoba and all his friends and relations resumed their different offices, as in the time of the late Govind Rao, except Mungal Pareks, who would no longer have the management of the domestic administration.

When Malhar Rao received intelligence of Raoba's success in confining Kanojí, and putting Anand Rao upon the masnad, he was apparently greatly rejoiced; he fired a salute from all the guns in the fort of Khurry, and wrote to Raoba, congratulating him on so happy an event, and praised Raoba for his faithful attachment to Govind Rao's family. Matters afterwards went on very quietly, and Malhar Rao, in full confidence that Raoba would restore Nariad to him, remit the Peishkush, and make some further compensation, instructed his vakíl to speak to him concerning the same; this he did, but Raoba avoided giving any answer till he had made all his arrangements for the safety of the government and the country.

Kanoji's confinement trook place about the month of November,

1800, and until the month of March, 1801, or after the termination of the Húli festival, Raoba gave no answer respecting the restoration of Nariad; on the contrary, he expressed his indignation at Malhar Rao's unjust pretensions, and hopes of Nariad being restored, and said that Raoba, as a karbary or dewan, could not take upon himself to remit the Peishkush, which was established by Fatteh Sing so long ago, and desired his vakíl, Gangadar Punt, to write to him, that it was necessary to pay the Peishkush of three years due to the government of Baroda.

Malhar Rao's vakíl did so, but at the same time wrote to him that Anand Rao was a man of weak intcllects, and not fit to be upon the masnad, and that the whole government was managed by the Purvoes, (meaning Raoba and all his relations,) who did not mind anything but their pleasure, and their own interests, to the ruin of the state and the country; that Kanojí was not entitled to the government, being born of a Rajput woman, that Anand Rao was a fool, and unfit for the masnad; and that Fatteh Sing was at Punah, and that it was a matter of doubt whether the Peishwa would let him return, besides that he was young and unfit for government; he concluded with recommending his levying new troops, and taking possession of Baroda at once.

Malhar Rao, finding that all hopes of Raoba's complying with his wishes were gone, and receiving from his vakíl a regular account of evcry transaction which passed at Baroda, with every information regarding the state of the force, and how much the whole government was at the mercy of the five or six Arab Jamedars and Banians, began levying troops with the view of laying the country waste, and taking Baroda if possible. Gangabái, the widow of Damají, and the mother of Manají, who invited Kanojí, also wrote Malhar Rao a letter in the name of Kanda Rao, as he was then on the masnad, saying that the Purvoes had confined Kanojí, and having placed a fool upon the masnad, had made themsclves masters of the country; that all the Gaikwar's family were starving, and that they were surprised that he, being one of the Gaikwárs, did not think of levying troops or coming to their assistance; and that if he had any regard to the name of Gaikwar, he should lose no time in coming to Baroda, take the administration from the hands of the Purvoes, and make arrangements for the preservation of the Gaikwár's name and state. Upon this he began augmenting his levy with vigour, and determined to make war the second time, and pay himself by becoming the Rájá of Gujarat.

While this sort of correspondence was going on between Malhar

Rao and his vakíl, the latter continually complaining to Raoba that his master gave no answer respecting the payment of the Peishkush, and Raoba finding no overture from Malhar Rao for liquidating this old account, and that on the contrary he was vigorously raising troops, and that his vakíl, Gangadar Punt, under the plea of going to perform some religious ceremonies at Chandor Karnally, had gone to Khurry; he prevailed upon those people who had guaranteed the treaty of peace in 1794, and been security for its performance, to go to Khurry, and demand from Malhar Rao the arrears of the Peishkush, and his reason for raising troops. Seid Múlakella, Manor Punt Nana, Vajnauth Pandit, Vakatsawseth, and several other persons, went to Khurry, and had an interview with Malhar Rao; but all the reply they had was, that he was short of cash, and that the troops he was raising were with the view of rooting out the Kúlies from the country; they observed to him that they feared such an answer would not be deemed satisfactory by the Darbar at Baroda, upon which he dismissed them under a promise of giving them a more satisfactory one the next day; but before day-break a guard of Pattans was put on each of them, and it was signified to them that if they did not go back to the place whence they came, he would put them all in close confinement. Thus circumstanced, they had no alternative, but to return to Baroda. This happened about the latter end of October, 1801. At this time Malhar Rao had a force of about fifteen thousand horse and foot; and no sooner were the above people returned, than he quitted Khurry, leaving a sufficient garrison there, went to Bessanaghar, and took that place early in November. Makúnd Rao about this time arrived at Khurry with three or four hundred troops; Sidy Amber, who was at Surat, also came to Khurry by the way of Ballassonor; Semí Rajanpúr arrived with ten Bracks of Scindiah's Pattans and Dekkani Sepoys; and Sevaram Jagadiss, otherwise Sevaram Gardy, whom Malhar Rao had, by dint of money and promises, brought over to his interest, instead of going to join the army of Babají Appají, which was at Garwell, about ten koss from Ahmedabad, went with all his force to Khurry, and joined Malhar Rao, in consequence of which Babají was obliged to leave his station and take shelter at Kambay, until he received reinforcements from Baroda.

Malhar Rao kept himself quiet at Kalol, assembling all the troops he could, till he had nearly forty thousand horse and foot, including Kúlies, \&c. All his best troops were stationed at Kalol ; the Pendarís and Kúlies were employed in annoying and plundering

Govind Rao Gaikwár's territories, and in the mean time he was corresponding both with Kanojí and Anand Rao, and with several women of the Gaikwar family at Baroda; to the former he gave out that he was fighting to release him from his situation; for although he had when in power written a threatening letter to him, still he was one of the Gaikwárs, and more fit for the charge of government than the fool whom the Purvoes, with the view of keeping the government and the eountry amongst themselves, had put upon the masnad; to the latter he said that he was sorry to observe him more like a state prisoner than a master, and that he was levying troops with the view of coming to Baroda, to chastise and confine all the Purvoes, releasc him from that sort of treatment, and make the necessary arrangements for the preservation of the country, as well as of his uncle Damajís family. Anand Rao wrote him for answer, that he would be happy to see him, as the Brahmans, as he always called Raoba and other officers of government, had treated him like a fool, and that they were no longer under his authority and control, and therefore the sooner he came and made his arrangements for the good of the country the better. This letter was shown to Husson Borah, in the presence of Kanda Rao, Jevají Bassarah, Ragojí, and others, when he went to Khurry by Major Walkcr's desire to obtain the release of Captain Williams and Sanderjí.

While this sort of correspondence was going on between Malhar Rao, Kanojí, Anund Rao, and the women, the former employed a vast number of intriguing people to disunite the Arabs, and bring them over to his interest; this measure was not without success, as some of the Jamedars had already promised to join him, and likewise some of the Pagahs and Selledars, except Mír Khamaladin Khan, whose people were above listening to any proposals of the kind. Malhar Rao's intention was to conquer all the Gaikwár's territories, destroy the Purvoes, and take Baroda, not for Kanojí or for Anand Rao, but for himself, the former not being entitled to reign from his not being born of a Dekkani woman, the latter because he was a fool and incapable of bcing trusted with the government; and that he, being the nephew of Damají, had the best right to it. He therefore determined to put his plan into execution, and had taken his measures, and made his preparations accordingly.

Raoba, aware of this, and knowing that some of the Banians, and most of the Arab Jamedars, and of the Pagahs and Sillidars, were favourably inclined towards Malhar Rao, had no alternative but to solicit the aid of the English to reduce Khurry, and take Malhar

Rao. It was only by their assistance that he could hope to save himself, family, and indeed the whole body of Purvoes, from falling into the hands of their arbitrary and cruel enemy, who would not spare them.

Raoba accordingly dispatched Mír Khamaladin Khan and Gopal Rao to the Governor at Bombay. In consequence of some previous correspondence, the Governor had sent Major Walker, who had several conferences with Raoba, and as report says, one or two meetings with the Rájá, Anand Rao, who, of course, would act whichever way the Purvoes desired, and who on receipt of a present, would put his seal to any paper whatsoever written by his karbaries. What report the major sent to Bombay was not known, but soon after, the Governor, Mir Khamaladin Khan, and Gopal Rao, went to Surat, and the English troops began to assemble at Kambay. As soon as the Governor had made his own arrangements, he left Surat and went to Kambay, to see the plan carried into cffect, as also, it is supposed, with the view of seeing Raoba, who, soon after the Governor's arrival at Kambay, went there to see him.

The troops marched from Kambay, and came by Ahmedabad to Adulhage, and joined Babají's army, which was lying there, after having been beaten and repulsed several times by Malhar Rao's force.

Major Walker's wish, one should imagine, must have been to effect an accommodation between Malhar Rao and the Baroda government, and to reconcile them to each other, for a negociation to that effect was opened almost from the time he joined; but Malhar Rao obstinately resisted every proposal, at the suggestions and advice of Becher Jattí, Pana Bacha, and scveral other people in his confidence, and with whom he advised; he also proposed insolent terms, and behaved in so ridiculous a manner, that Major Walker was obliged to continue his march, and proceed to a place called Shertah, where he halted in a large field between that and a village called Syed, about three koss from Kalol.

At this place Malhar Rao had an interview with Major Walker. The particulars of the conference between them were not known, but from reports then prevailing, it was understood that Malhar Rao was to go to Kambay with five or six hundred men, accompanied by Major Walker's people, in order to settle all differences with the Governor, who was there when this arrangement was completed. Malhar Rao after making and rcceiving presents, took leave of the major and went to Kalol, where he was to have remained; but on
his arrival he forgot all he had settled at Shertal, and with the advice of his associates he went from Kalol directly to Khurry.

Major Walker and Babají, finding Malhar Rao was not at Kalol as agreed upon, marched with their respective forces to Badassen, about two koss from Khurry : on their arrival there, Sunderjí and Captain Williams went into the fort, where Malhar Rao detained them, and attacked Major Walker, who was obliged to retire and remain under intrenchment at Badassen.

While in this situation, Husson Borah and Vacatsawset went to Khurry to obtain the release of Sunderjí and Captain Williams. Vacatsawset returned; but Husson Borah remained with Sunderjí and Captain Williams, treating with Malhar Rao respecting them; in the mean time, the reinforcement from Bombay arrived, attacked and took the outward battery, and then the fort.

Previous to the English taking the fort of Khurry, Malhar Rao had gone to the English army, still in hopes of making some arrangements; but he left orders to his son, Kanda Rao, and his family, to leave the place and go to Drangcdraw in Kattiwar, where they accordingly went, with such baggage and necessaries as could be carried away.

Malhar Rao came to Kambay, where the Governor prevailcd upon Raoba to give him a Jaghír; Nariad was accordingly given him, where he remained from June till December, when he made his escape, and went to Limrí, thence to a place called Morby, and directed his son and family to join him there. At this place he remained one month, and went to Maliah, a village in Kattiwar, where, from what cause or reason nobody knows, he put his son Kanda Rao in confinement under the guard of Captain Joaquim, who had joined him at Morby; he afterwards went to Shapúr, a village of the Parganah of Bhíj. At this place he remained quiet for about four or five months; he then began levying troops, and no sooner was he able to muster about four thousand horse and foot, than, leaving his women there under the care of Hanmont Rao Gaikwár, and taking Kanda Rao with him, he came to Sailah, by the way of Kua; in this district he burnt and destroyed about five villages. While le was lying there with his small force, the Dessoy of Patti solicited his assistance to oppose the force of Babají, which was coming to that place on his Mullukguery collection. What answer Malhar Rao gave him was not known, but it it is supposed he declined for want of a sufficient force and money. His intention was to go round the country to
collect troops and money; he accordingly went from Sailah to Púrbunder, Mangrore, Junagur, and other places in that direction, collecting money and troops; and after having collected near twelve thousand horse and foot, he returned to Kattiwar, and came to Sailah again, whenee he sent a small party to Dollerah to see who was there; but Babaji's army coming to Warwan at the same time, obliged him to move and go towards the Parganah of Babarcah, where, a little before he was attacked by Babajís troops, Kanda Rao was liberated from confinement.

In this attack he lost a great many of his horse and foot. Want of money and provision, and the apprehension of being taken by Babají, caused many to desert, particularly about one thousand Scindians, and almost all the Arabs whom he had entertained at Junagur. Malhar Rao, with about two thousand men and horse, including followers, was obliged to fly to Tallajah and thence to Baunagar, where the Rájá of that place received and gave him some money, some say five thousand, others say six thousand rupees, to defray his expenses ; but as he could no longer remain there, nor go to any other place by land, all his people having left him, the Rájá and his dewan got him a boat, to go to Púrbunder by water. On this vessel, Malhar Rao, his son Kanda Rao, Jevaji Bússarah, Rawjí, and Gungather Pundit, embarked with the view of landing at Púrbunder, or at Mandaví, and accordingly dropped down the river, but before the boat was out of the river, the Rájá and his dewan, from what reason it was not known, took the opportunity of the Surat convoy coming to Gogo to frighten Malhar Rao by saying, that the English government had sent that vessel to apprehend him. This made him return and land at Baunagar again, and as Babají was in the neighbourhood at this time, the Rajá declined giving him any shelter, but gave Jevají Bussarah, Rawjí, and Gungather Pandit, every assistance in his power, and escorted them safe to Dangadrah that very night ; he then sent Malhar Rao and his son to the lills of Pally Tanah, where, after six days they were discovered and seized by a party of Katty, employed by Babají for that purpose, and were immediatcly delivered up to Babají, in his camp, at a place called Dary.

At this place the father and son remained a fortnight under a guard, suffering from want of food, clothes, and bedding, Kanda Rao, who was very unwell when taken by the Kattys at the hills of Pally Tanah, became seriously ill, and Malhar Rao apprehensive of fatal consequences, proposed to Babají to send him to Gangabáí at Baroda. Babají consented to it, but Kanda

[^108]Rao declined, saying that if they were to be treated in that manner, he would rather stay with his father, and die with him; he afterwards got better, when he and his father were sent to Ahmedabad under a strong guard.

On their arrival at this place, Malbá, who was acting there under Babají, put them in close confinement in a dirty old ruinous house under ten sentries, and allowed them two seers of flour each per day, a quarter scer of ghee, and two pice-worth of regetables, but before this small quantity of coarse and mean provision reached them, the best part of it was eaten by the sepoys employed to bring it.

In this situation they remained for eight or ten days, when they were conducted to a room, the doors and windows of which were all filled up with chunam and bricks, without any opening for the circulation of air, and in which there was only one small opening to admit the provisions which were sent every day. In this room they were obliged to dress their victuals, sit, sleep and perform all the other functions of nature.

Some days after two pair of heavy irons were brought, one was put on Malhar Rao, and the other they wished to put on Kanda Rao, when some respectable people assembled and said that was not just, because, however deserving Malhar Rao might have been of such treatment, Kanda Rao was innocent, and that it was hard he should undergo such treatment, which made Malbá decline putting him in irons.

No sooner was Malhar Rao put in irons than he declined receiving the provisions which they sent him, because with them on he could not dress his victuals; upon which they agreed to take off the irons just about dinner-time, and put them on again; but a few days afterwards they did not care whether he dressed his victuals or not, and whether he ate or not, and declined taking off his irons. After this, Malhar Rao, for upwards of six months, lived upon four pice-worth of milk and a little sugar, and Kanda Rao upon two seers of wheat or badjerí flour, a little ghee, and two pice of vegetables; and all the time they wcre thus confined, they were not allowed to change thcir clothes, (indeed they were allowed none to enable them to change,) wash their bodies, nor to shave themselves, or cut their nails.

In this situation they were brought to Baroda, and sent to a garden called Mastú Bagh, where they had nothing to eat, or sleep on, so that the two days they remained there they were obliged to sleep on the ground, and Malhar Rao being in irons, could scarcely move from the place where he was put by the Palankin Kúlies, who brought them from Ahmedabad.

While in Mastú Bagh, Anand Rao Gaikwár paid Malhar Rao a visit there; he entered the garden upon a tatú, with four or five khidmatgars, and came to the place where Malhar Rao was; he then embraced him; what passed between them nobody knows. Kanda Rao was at some distance, and as Anand Rao never asked after him, he kept himself where he was. Soon after he came, Husson Borah made his appearance, and while they were engaged in conversation, Major Urquhart carne, and with great difficulty carried Anand Rao to Major Walker.

A few minutes after he was gone, Mr. de Souza came and sat for about an hour, spoke both to Malhar Rao and Kanda Rao, and offered them his services at Broach, or on the road to that place.

The next day they left Baroda and went to Meyam Gam, and thence to Kabertan, a village of the Broach Parganah, where the officer, commanding the English guard which accompanied them, ordered the irons to be taken off.

On their arrival at Broach, they were carried to the Darbarhouse in the fort, where they were treated with great attention, and provided with every thing they could wish for.

They left Broach late in the season, and were obliged to put back and proceed over-land, and since their arrival at Bombay, they have been well attended to, and have every reason to be satisfied with the treatment they have met with from the English government.

The succinctness of the conclusion of this narrative, is too characteristic of the self-denying demeanour which so strongly marked the whole character of the late Mr. Duncan, to admit of a doubt that it was dictated by him. It is gratifying to be able to add, on the authority of a friend who was at the time here alluded to on the spot, that Malhar Rao received every kindness from the Bombay government, that he was permitted to be at large on his parole, and that he visited the principal gentlemen at the Presidency, to whom he took every opportunity of expressing his sense of the liberal treatment he received from the government, and in particular of the kind and humane attention of the Governor, Mr. Duncan.

An anecdote with which the Editor has been favoured by the friend above alluded to, will more fully illustrate not only the interest that was taken by Mr. Duncan in everything that concerned Malhar Rao, but also the peculiar character of Malhar Rao himself.

A piece of ground on Malabar-hill, on which there was a house and garden, and a Hindú pagoda, had heen sequestrated and sold by the sheriff, the purchaser being an opulent and highly respectable Parsí merchant.

The Hindús resident at Bombay, notwithstanding the transfer of the property, claimed a right to the pagoda, as a place of religious worship, which had been long frequented by their caste. The claim, as a matter of right, was objected to, and it became a subject of tedious and expensive litigation in the Court at Bombay, of which Sir James Mackintosh was then Recorder.

Malhar Rao put himself at the head of the Hindu claimants, and the suit was carried on in his name, at the expense of the Bombay Government, who instructed their law officers to prosecute it. Malhar Rao had a strong personal feeling in the matter, and was constant in his attendance in Court, whenever the cause was likely to be discussed. The action, however, was defended with much spirit, and Malhar Rao, not accustomed to the formality of legal proceedings, became impatient at the "law's delay," which was to him quite unaccountable, nor could he ascertain with any certainty, when a decision was likely to be obtained.

He consequently thought it might be better terminated by the parties litigant, without troubling the Court further, and he formally proposed to his Parsí antagonist in the suit, that they two should decide the matter by personal combat. "I have a sword," said Malhar Rao, "you can get another, let us meet and fight for it, and whichever proves victorions, will of course be allowed to keep the pagoda." We need not say, that this mode of "joining issue," however consonant to Malhar Rao's principles and previous practice, was declined by the Parsí, who would indeed have stood but a poor chance in a personal encounter with such an antagonist.

Malhar Rao was in person of small size and stature, remarkably active, with a keen penetrating eye, and very intelligent countenance. He never appeared without a sword in his hand.-Ed.

Note on the Communication of J. R. Steuart, Esq., (page 273,) by Professor Wilson, Director of the R. A. S.

Some of the coins of which Mr. Steuart possesses so extensive a collection, and of which he has favoured the Society with such full and valuable illustrations, have from time to time found their way to Calcutta, and been noticed and delineated by Mr. James Prinsep in the Journal of the Asiatic Society of Bengal. Knowing the active interest which that gentleman has displayed in the investigation of the different important numismatic discoveries recently made in India, and anticipating from his singular talent for deciphering novel forms of Indian characters, the possibility of his finding the key of those which occur on Mr. Steuart's coins, I requested Captain Harkness to transmit to Mr. Prinsep a copy of the engravings now published. The advantages expected from this communication have been more than realized, as the characters have been deciphered and the inscriptions satisfactorily read. The May number of the Bengal Journal just received, contains an interesting account of Mr. Prinsep's success, and repeats the legends of Mr. Steuart's plate arranged in the order in which each is to be read, differing chiefly in this respect from the plate, in transferring to the head of the line the two or three letters which there stand at the end of it.

From Mr. Prinsep's verification of the character, it results that the language of the inscription is Sanskrit, written in an ancient form of the Deva nagari alphabet, and omitting most of the vowel signs, as is still the practice, it appears, in the language of Sindh. The letter $r$ and some of the compound consonants arc elongated below the line, and thus give the peculiar appearance which is characteristic of the inscriptions on these coins.

The equivalents of the different inscriptions will be found in Mr. Prinsep's paper, but as a specimen of his interpretation we may take the first line in our second plate, removing the last two letters to its commencement. It then may be read "Rájnah Kritrimasya Sáhasya, Swami Janadama Putrasya (coin) of the elected King Rudra Sah, son of Swámi Janadama."

The other inscriptions all commence with the same words,"Rájnah Kritrimasya, the king made or elected," varied in two or three instances to "Rájnah Mahá Kritrimasya, the great elected king;" the names anount to eleven, thus specified by Mr. Prinsep.

1. Rudra Sah, son of a private individual, Swámi Janadama.
2. Agadama, his son.

Here the connexion is broken.
3. Swami Rudra Dama.
4. Swami Rudra Sah, his son.

The connexion again broken.
5. Dama Sah, of whom no coins exist.
6. Vijaya Sah, his son.
7. Vira Dama, another son of Dama Sah.
8. Rudra Sah, son of Vira.
9. Viswa Sah, son of Rudra.
10. Atri Dama, another son of Rudra.
11. Viswa Sah, son of Atri Dama.

The only object of this note being to complete the results afforded by Mr. Steuart's plates as the ground-work of Mr. Prinsep's interpretation, it is unnecessary to enter into any examination of the latter gentleman's attempts to assign a date and position to the Sahs of Cutch, especially as they are less successful than his determination of the purport of the inscriptions. The title Sah is, as he shows, by no means uncommon in India, as in the case of the ruling family in Nepal. The style of the coins and the apparent imperfect representation of Greek characters on one face, justify the inference that these princes reigned in Cutch in the early part of our æra.
[An interesting paper has been received, on the Manners and Institutions of the Independent Nestorian Christians dwelling in Kurdistan, written by Mr. Rassam, one of their body, whose extensive acquaintance with the various tribes in that part of the world has neeessarily opened to him peeuliar sources of information.

This paper was received too late in the session to appear in the present number of the Journal.-Edit.]

# PROCEEDINGS OF THE COMMITTEE 

OF

AGRICULTURE AND COMMERCE.
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## ROYAL ASIATIC SOCIETY.

## PROCEEDINGS

## OF THE

## COMMITTEE of AGRICULTURE and COMMERCE.

## April 8, 1837.

A Committee was held this day at one o'clock.
Present:-The Right Hon. C. W. Williams Wynn, M. P.; Sir Charles Forbes, Bart.; Sir George Thomas Staunton, Bart.; Colonel Briggs; John Fraser, Esq.; Dr. Horsfield; Louis H. Petit, Esq.; Colonel Sykes ; Captain Harkness.

On the proposition that the Right Hon. Mr. Wynn, the President of the Society, do take the Chair, Mr. Wynn suggested that Sir Charles Forbes, who had taken so lively an interest in the success of the Committee of Agriculture and Commerce, should be elected its Chairman ; but that till that gentleman arrived, he would be happy to supply his place. This suggestion was unanimously agreed to, and

It was Resolved,-That Sir Charles Forbes be requested to accede to the nomination.

On the arrival of Sir Charles Forbes, the resolution of the Committee was communicated to him; to which having kindly acceded, he was duly elected Chairman of the Committee of Agriculture and Commerce, and he took the Chair accordingly.

The Secretary read the following Minutes of the Council of the Society :

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\text { "JULY 16, } 1836 .
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[^109]"February 22, 1837.

## "RULES FOR THE COMMITTEE OF AGRICULTURE AND COMMERCE.

" 1st. That all Members of the Council be, cx-officio, Members of the Committee.
"2nd. That Members of the Committee not Members of the Council, shall go out at the Anniversary, and that others from the general body of the Members of the Society shall be elected in their room; or the same Members may be re-elected. The election to be by ballot.
" 3 rd . That the Committee do from time to time report their proceedings to the Council.
" 4 th. That any person not a Member of the Society, desirous of furthering the objects of the Committee, may be at liberty to subscribe for the same.
" 5 th. That all subscriptions for such objects be kept separate from the general fund of the Society, and appligd to the objects of the Committee only.
" 6 th. That all subscribers of one pound and upwards be entitled to copies of all printed proceedings of the Committee."

Resolsed,-That the Committee are anxious to reliese the Secretary of the Society at the earliest practicable period at which their funds will permit, from this additional call on his time and exertions; but in the mean while, they hope that Captain Harkness will lave the goodness to conduct the business of the Committee.

Resolved,-That the Secretary be authorized to obtain occasional assistance, at an amount of expense not exceeding sixty pounds per annum.

A mass of Papers were submitted to the Committee, containing the Replies of the several Collectors under the Presidency of Madras, to Queries suggested by Mr. M.Culloch, on statistics, manufactures, commerce, \&ic., and transmitted to India by the Committee of Correspondence of the Society.

Resolved,-That these papers be conreniently arranged for reference ; and that a list of the Queries, with marginal notes indicating the corresponding number of the Reply, the places from which, and the persons by whom answers have been returned, be prepared.

Resolved,-That Mr. M'Culloch be informed of the receipt of the replies to his queries from Madras; and that he have access to the same.

## Read the following communications:-

1st. From Mr. Harman Visger, of Bristol, on Lichens, with specimens, Sc., \&e.; and expressing his conviction that the extensive regions of the East must produce, in abundance, some of the known, and many of the unknown, though probably not less valuable, lichens available for dyeing: that a large and cortain supply of good sorts would greatly stimulate the consumption, which has been much checked by the short supply and high price of the best-known Lichens used for dyeing ; that, at present, he esti-
mates the annual import at from $60,000 l$. to $80,000 l$.; that he would be happy carefully to test any specimens that may be sent to him, and to report on them; and that he harl sent to the Committee such specimens of Lichens as he had then been able to procurc, with a list and paper of instructions, not confined merely to them, but comprising others which he would send so soon as he could procure them. (See page 4).

2nd. From Mr. Southey, of Coleman Street, on East Indian Wool, with specimens, \&c., \&c. (See page 5).

3rd. Extract of a Letter from Messrs. Forbes and Co., of Bombay ; on Indian Iron.

Resolved,-That the thanks of the Committee be returned to these gentlemen for their kind attention; and that the list of Lichens and paper of instructions drawn up by Mr. Visger, and the letter from Mr. Southey, be printed in this day's proceedings. (Sec page 4).

Resolved,-WThat the specimens of Lichens furnished by Mr. Visger, of the ammoniacal liquor for extracting the colour, and of the colour required, be sent to the different Presidencies of India, and to Ceylon and China, through the medium of the home and local Governments, and to the several Horticultural and Agricultural Societies already established in India; and that fifty copies of the Committee's Proceedings of this day accompany each assortment of the specimens.

Resolved,-That the subject of Mr. Southey's communication on East Indian Wool, and of the extract of a letter from Messis. Forbes and Co., of Bombay, on East Indian Iron, be allowed to lie over until the result of the examination of the expected investments of those articles be known.

Read a letter from the Horticultural Society of London, dated the 31st ultimo, enclosing a paper of proceedings of the Meerut Horticultural Society, and the report of the Members of the Committee to whom these communications had been referred.

Resolved,-That extracts from the paper of proceedings of the Mreerut Horticultural Society be published in the Committee's proceedings of this day (see page 7) ; and that in all similar cases, papers be referred to particular Members for their report thereon.

Professor Royle suggested that specimens of the species of Lichen used in India for the purpose of dyeing (one of which is cxtensively cmployed in the Northern provinces, and is there called Chulcheleera,) be obtained, and sent to Mr. Visger for the purpose of being submitted. to experiment. :

Resolved,-That the Committee take measures to obtain specimens of those Lichens ; and that they be sent to Mr. Visger for experiment.

An offer was made by Professor Royle, to furnish a list of all the plants of India which yield oil.

An similar offer was made by Colonel Sykes, witli reference to the plants of the Dekkan which are suitable to the purposes of domestic economy.

Professor Royle also promised to prepare a paper on the subject of Caoutchouc, and to submit it to the Committee, at as early a period as his present numerous avocatis as would permit.

Resolved,-That the Committee will be happy to avail themselves of the kind offers of Professor Royle and Colonel Sykes.

Resolved,-That J. G. Malcolmson, Esq., be nominated a Member of the Committee.

Resolved,-That letters be addressed to the Horticultural and Agricultural Societies of India and of England, expressive of the wish of this Committee, to enter into communications with them on all subjects of mutual interest to the respective institutions.

## List which accompanied Mr. Visgeris Specimens of Lichevs, \&c.

"Lichens of Commerce.

No. of Specimen.

Commercial Name.

1. Canary Orchilla Weed Lichen Rocella
2. Cape de Verde ditto...... - ......... 200 to 300
3. Western Island ditto ... - ......... 150 to 230
4. Madeira ditto.............. -........ 100 to 150
5. African ditto
6. South American ditto
7. Sardinian ditto ...........
8. Cape of Good Hope ditto
9. English ditto
10. Canary Rock Moss ...... Unknown
11. Sardinian ditto $\qquad$ $\left\{\begin{array}{r}\text { Pustulatus ditto, of } \\ \text { Sweden, Norway, } \\ \text { and England ...... }\end{array}\right\}$
12. Tartarous Moss

Botanical Name.
Value per Ton.

$$
250 l \text {. to } 350 l \text {. }
$$

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200 \text { to } 300
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100 \text { to } 150
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30 \text { to } 120
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$$
80 \text { to } 120
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$$
30 \text { to } 45
$$

(supposed) Pustulatus

## 20

No commercial value
80 to 90
70 to 90
$\left.\begin{array}{r}\text { Lichen Pustulatus, or } \\ \text { Gyrophera ........... }\end{array}\right\} \quad 20$ to 40
Lichen Tartarus ...... 20 to 40
"Lichens liable to be mistaken for those of Commerce, but possessing no value.

No. of May be misSpecimen. taken for

## Points of Difference.

21. Nos. 1 to 9. The bad is flat, and has a bitterish taste; the good is cylindrical, and not bitter.
22. No. 12. The difference is apparent, but the Villous is generally more or less mixed with the Pustulatus whenever collected.
23. No. 10. The great similarity between the good and bad Canary Mosses, renders the collection of the good a matter of some difficulty.
" The Good has a nearly white powder on its surface, towards the centre; the under surface is of a gray colour, and is not hairy; if wetted it does not turn of an orange colour; its edges are flat and thin.
"The Bad has no mealy white powder on its surface; its under side is lairy, and blacker than the good; its edges are usually more or less knobbed, and on being wetted it generally becomes of an orange colour.
" No. 24, contains a mixed sample of good and bad, which has been wetted with water.
"The useless Mosses greatly outnumber the useful, and vary from each other, in some instances, by such slight shades of differenc, that the above specimens of them can serve little more than to call minute attention to the subject. A test for the discovery of colour is therefore necessary.
"Test.-Take liquor ammoniæ, very much diluted with water, but strong enough to retain a powerfully-pungent smell-half-fill a phial bottle with the same, then add of the Lichen (being broken up to a conrenient size), so much as will lightly fill up the liquor, so that the whole may be readily stirred about. Care must be taken to leave at lcast one-third of the bottle for air. The bottle must be kept corked, but be frequently opened, and the contents stirred with a small stick. The colour will begin to exhibit itself in a few hours, and the more rapidly in proportion to the warmth of the place in which it is kept; but the heat should not exceed $130^{\circ}$ Farenh. A piece of white silk placed near the surface of the fluid will show the colour before it would otherwise be perceptible. This test will only serve to show where colour exists, but will not develop it to its fullest extent.
" Localities.-The good sorts are generally found in rocky or stony districts, or where dry stone walls abound; in the neighbourhood of the sea,or if distant from the sea, in places exposed to sea breezes. The more raluable are met with in volcanic islands. My own experience has been principally in the Canaries, where I find the morc arid the situation, the better the quality of the Lichens. When the land is high and humid, the useless sorts alone are met with. In dry places near the sea, there are only the good sorts; and there is generally a belt between the two, in which both good and bad are found on the same stones, and not unfrequently overrunning each other.
"There is with the samples a small bottle of ammoniacal liquor, of the strength suited for test; and also a small bottle of the colour to be produced."

## Mr. Southey's Communication.

"London, 24th Nov. 1836.
" We have much pleasure in offering you the following observations on the Wool imported into this country from Bombay, by which you will perceive there is in India a race of sheep which produces Wool that can be applied to useful purposes in some of our manufacturing districts; at the same time it will be seen that, with due attention to the assortment of the Wool, and to the improvement of the breed of sheep, a more valuable description of Wool may be produced.
"Most of the Wool which has hitherto been imported into this country
from India, has been found of a short staple, with a vast quantity of hairs interspersel through the Wool (what is technically called kemp hairs): they will not receive dye, which renders such Wool unfit for general use, and consequently confines its application to the more ordinary branches of manufacture, such as blankets, and other low quality of goods.
" It evidently appears there are various descriptions of Wool produced in India, as we have seen some of a superior quality, which we are given to understand was produced in the province of Guzerat, some of which we estimate to be worth $15 d$. to $18 d$. per 1 lb .
"The whole of the Wool hitherto imported from thence, came from the island of Bombay, we are therefore unable to form an opinion where the Wool is grown; but should the information we have obtained prove correct (that it is produced in Guzerat, and that that portion of the province is under British sway), it may be deserving consideration, whether an improvement in the quality of the Wool would not prove an advantage to this country.
"Under this assumption, we shall proceed to make the following obser-vations:-
" During last year, there was imported into London 773 bags of Indian Wool, and into Liverpool 624.
" 1397 bags-these were sold at public auction, at $4 \frac{1}{4} d$. to $14 \frac{1}{2} d$. per lb. They were chiefly white, and well washed : there is occasionally found a few black locks interspersed through the bags, which ought to be carefully excluded, as the Indian sheep's Wool is generally applied to the manufacture of white goods, consequently any admixture of coloured Wool tends to deteriorate its value.
"We have discovered amongst the finer qualities of Indian Wool, a considerable portion of yellow and discoloured locks, which operates very materially against its sale. In order to remove such an objection, it is requisite the discoloured wool should be selected from the white, and each kind packed in separate bags, by which means an increased competition for the article would be produced; at the same time its value would be thereby enhanced. To which we may further add, the Wool would be bought with greater avidity, as it could then be immediately applied to the various purposes of manufacture without further trouble or expense.
"To those who may feel the laudable desire of producing an improvement in the breed of sheep, and quality of their Wool, we would recommend the introduction of some of our best-woolled English rams amongst the Indian ewe flocks, as by so doing, the quality of the Wool would be materially improved, inasmuch as it would thereby become both a better and more useful class of Wool; at the same time the quantity would also be considerably augmented.

[^110]
## Extract from the Proceedings of the Horticultural Society at Meerut.

"The Secretary reported that considerable progress had been made in the garden since the last Meeting, that many of the seeds sown had vegetated, the stoek of nursery trees and plants been considerably increased, and a large portion of ground appropriated to the cultivation of strawberries, of which a great quantity of a very good deseription had been presented by Mr. Hamilton. Also, that at the conelusion of the rains he had purehased, at wery moderate rates, from a native nurseryman travelling up the country with a large stock for sale, about 300 plants, of twenty-seren kinds, mostly of well-grafted fruit-trees; amongst which were four kinds of oranges, two of pomegranates, chukotras, two of peaches, jakes, \&c., and that, with two or three exceptions, the whole continued to the present moment in excellent order. The singularity of the fact of an individual earning a livelihood by means much at rariance with the usual habits of the cultivators of the land, indueed the Secretary to make several enquiries of this man, whieh led him to state that he had an extensive nursery at Cawnpoor, devoted almost exclusively to the raising of fruit and ornamental trees and shrubs, which annually, at the eonclusion of the rains, were taken by himself and his counexions in small parties of two and three to various parts of the country; that they found a ready sale for them amongst the richer natives who had extensive gardens, and sometimes amongst European gentlemen. That he had in former trips been as far as Nagpoor southward, and Neemuch westward, and would now, unless he sooner disposed of his stoek, go as far as Loodheeanah. The plants were very neatly and compactly arranged, with just sufficient earth tied on the roots to prevent them from drying, and appeared, although upwards of three weeks out of the ground, in perfect condition.
"Resolved,-That, with reference to the increase of labour in the garden, and the necessity of a proper distribution of the several duties of the gardeners, such as grafting, collecting of seeds, \&e., three additional mallies be entertained, on the usual wages of 4 Rs. per mensem.
"The Secretary reported that the plants despatched by Dr. N. Wallich, of the Company‘s Lotanical Garden at Calcutta, had arrived. Amongst them are five kinds of Mangoe, the Mangosteen, Chocolate, Alligator Pear, the Sapota, the Jamrool, Japan Sweet Olive, also the Logwood and Cajuputi Oil Tree.
"The Seeretary reported that he had receired the following communications since the last Meeting of the Soeiety.
" From Captain C. M. Wade, Political Agent at Loodianah, to Captain Anderson, H. A., consigning a small parcel of Prangoss seed to his care. The seed is described, and the extreme importance attached to its introduetion into England as a cure for the rot in sheep, by previous acclimation in India, dwelt on by Mr. Moorcroft, in the first Vol. Trans. of the Horticultural Society of India. Captain Wade says the seed now sent were very recently
obtained from Little Thibet, where they werc first discovered by Mr. Moorcroft, and that he is anxious it should have a trial in the Society's garden. Several parcels have been sent to Calcutta, but do not appear to have vegetated. Should the present sample share the same fate, Captain Wade will endearour to have some of the plants brought to him in their native carth. (The Secretary stated that the seed had been sown, but had not as yet shown itself above ground.)
"From J. Bell, Esq., announcing the dispatch from Calcutta per steamer of a large quantity of three kinds of fresh American Cotton-seeds, (Upland Georgia, New Orleans, Sea Island,) and also Egyptian, had been dispatched to Captain Watt, at Allahabad, to be at the disposal of any Society in the Upper Provinces of India.
"From Captain W. H. Sleeman, to R. M. C. Hamilton, Esq., informing him that he had requested his friends at Jubbulpoor to send up a boat-load of the Otaheite sugar-cane, which would come free of expense to the Society as far as Ghurmuckteser. Also, that if the Socicty would send down camels, the expensc should be paid at Jubbulpoor, and the Society be thus enabled to get some whole canes, to compare with those that might be got from Moradabad.
" From Lieut. H. Kirke, Sirmoor Battalion, to the Rev. J. C. Proby, mentioning that he had been since last August instructing a gardener in the art of grafting, laying out grounds, and collecting seeds; that the man had made a great number of grafts of all the best trees in Lieut. Kirke's garden, and when completely ready, should be sent down to Meerut; which would be about the lst December next. The grafts are of three sorts of plum, two of peach, and one of the English green-gage.
"The Secretary exhibited to the Meeting two plants of the Egyptian cotton, reared from the seed forwarded from Calcutta about five months sincc. The plants were in full flower, about two and two and a half feet high, in apparent good condition, and stated to have been cultivated in a dry sandy soil in the Secretary's own garden, which, more from necessity than otherwise, had not been watered since the rains, and but slightly manured with the ashes of some rubbish burnt on the spot. The plants, both of Peruvian and Egyptian cotton, which had been cultivated in the Society's garden in a strong clayey soil, and abundantly watered, appeared on the contrary to be quite stunted, and little likely to yield any produce.
"The Secretary also mentioned, that the attendant circumstances in the cultivation of a small quantity of Nankeen cotton had been reversed, as the dry soil and much water were found to promote its growth, whereas that in the sandy soil without water, was in a very lingering condition.
"Considerable attention has lately been paid towards the improvement of certain products adapted for exportation. It may be thought worthy of consideration to ascertain whether produce for home consumption, particularly the more valuable sorts, may not be equally capable of improvement, with great benefit.
"The mass of the population of India being almost wholly employed in agricultural pursuits, has long been considered prejudicial to the improve-
ments of the country, the first step to which must naturally be looked for to a new system, and cannot be better commenced, than by acquiring superior products as the first stimulant to further inclustry.
"The agricultural products of India, as far as regards corn, have probably never undergone any changes. Although in Europe great advantages fiom time to time have been derived by the introduction of superior foreign grain, the attention of agriculturists seems still to be drawn to the subject, and new and important acquisitions to the English farmer have lately been made in the Victoria wheat.
"The light corn of India, as at present grown, may be best suited for dry light upland soils without irrigation, but the rich and irrigated soils certainly deserve a better and heavier description of grain than that now used.
" In order to show the necessity of improvement, the following is a short description, with sketches, of barley and wheat grown in India, compared with common wheat grown in England, and wheat in Syria, the latter in a climate somewhat similar to this, premising that the crop selected of India produce, was of the best description procurable in the district of Saharunpoor.
"No. 1. Barley, length of straw three feet two inches; fifty-four grains in the ear, weighing thirty grains.
"No. 2. Common red wheat, length of straw three feet nine inches, thirty-eight grains in the ear, weighing twenty-one grains. This is the wheat sown generally in the Dooab, in all soils.
"No. 3. The Daoode, or beardless wheat, length of straw three feet eight inches, twenty-eight grains in the ear, weighing twenty-two grains. The district of Rewarree, in Dilhee, is famous for this wheat; the flour from it is used for the finest sort of bread and sweetmeats.
"No. 4. Bearded large white wheat, forty-three grains in each ear, weighing thirty-one grains. This wheat is very uncommon: it is sometimes grown in the Futtyghur district; a few heads of it were found at Saharunpoor.
"No. 5. Heshbon wheat, as sketched and described by Messrs. Irby and Mangles, in their travels in Nubia and Syria, \&c. Length of straw five feet one inch, eighty-four grains in the ear, weighing 103 grains.
"Common English wheat, length of straw four feet two inches, forty-one grains in the ear, weighing forty-two grains.
> " Instructions respecting the planting of the Otaheite Sugar-cane, by Captain W. H. Sleeman.

"Four cuttings of three or four joints each must be planted in each hole; the holes are two feet asunder at the ends, and in rows which are four feet asunder. The cuttings are put in diagonally, so that one end may be at the surface, while the other is six or eight inches under the earth in the centre of the holes. The cuttings must lie so that the shoots may be at the sides, and not above and below.
" After the planting the holes are filled in, and the ground levelled; but when the watering commences, channels must be made for the water between the rows; and in the course of weeding, the earth is thrown up from between the rows upon the canes, which prevents the water from lying over them in the rains.
"The best soil is what the natives call Doomateen; the ground must not be at any time flooded, or under water in the rains; the ground must be well manured, just as it is for potatoes. A second crop inay be taken the second year. After the cutting, the stumps are burnt to the earth by setting fire to the dry leaves about them; the ground must be loosened around them in February, fresh manure supplied, and the watering goes on as in the first year."

# ROYAL ASIATIC SOCIETY. 

PROCEEDINGS<br>OF THE<br>COMMITTEE of AGRICULTURE and COMMERCE.

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\text { May } 26,1837 .
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A Committee was held this day at one o'Clock.
Present:-Sir Charles Forbes, Bart. ; the Right Hon. Sir Alexander Johnston ; the Right Hon. Holt Mackenzie ; the Honorable Mountstuart Elphinstonc; Sir Henry Willock; Colonel Briggs; Lieut. Colonel Sykes; W. Jerdan, Esq., Dr. Horsefield; J. G. Malcolmson, Esq.; W. Newnham, Esq.; W. Oliver, Esq. ; Captain Harkness.

Sir Charles Forbes, Bart., in the Chair.
The minutes of the last Committee were read and confirmed.
Sir Alexander Johnston informed the Committee that since their last Meeting he had received a letter, over land, from his son in China, in which it was stated that Lichens had been found in the Peninsula of Macao, and about the mouth of the Canton river : these Lichens are said to be inferior to those generally used in Europe, for dyeing; but Mr. Johnston had understood from well-informed Mandarins that in the province of Fokien, and in the environs of the city of Nankin, some excellent species are procurable, which there would not be any objection to send to Europe; that they were in fact encouraging the growth of them.

Read a letter from J. A. Stewart Mackenzie, Esq., M. P., dated the 22 nd instant, stating that he will be happy to promote the objects of the Committee, and to have his name added to the list of Members ; Mr. Mackenzie further states, that he will take an opportunity before
his departure for Ceylon, of consulting the Members of the Committce on the best means of carrying their intentions into effcct, as regards that country.

Resolved,-That an application be made to the Colonial Office, requesting that the Committee may be favoured with the loan of all the papers connected with the plan proposed by Sir Alexander Johnston, in 1810, for the cultivation of the waste lands of Ceylon, and which papers were deposited two or thrce years ago in the Library of the Colonial Office.

Read a letter from Professor Royle, stating that he had not been able to preparc the paper on Oil Secds, which he had hoped to get ready for reading at this Meeting of the Committee; and that the paper on Caoutchouc alluded to in the Committee's proceedings of the $\delta$ th ultimo would shortly be published.

Resolved,-That reference be made to the Horticultural and Agricultural Society of Western India, Bombay, for information respecting a grey-coloured moss, namcd Shennah, which is collected by the Bedouins on the Granite Mountains of the island of Socotra : this moss is used by the women to dyc their faces yellow ; and is mentioned in a report of Lieut. Wellsted, in the journal of the Asiatic Society of 13 engal, for the year 1835, page 144, where it is stated that the granite spires of the island are covered with it.

Resolved,-That copies of the Committce's Proceedings be sent to the editors of the chief provincial ncwspapers in the united kingdom.

Resolved,-That the Committee endeavour to procure specimens of the soils in which the various kinds of American cotton most approved in the English markets, are grown, with a view to the institution of a comparison of them with the soils of the cotton districts in India.

Resolved,-That a letter be written to his Majesty's Secretary of State for Forcign Affairs, forwarding the above Resolution, and requesting that he will have the goodness to obtain for the Committee from those parts of the United States where cotton is produced, the information and assistance required.

An extract from a pamphlet on the cultivation of cotton, by Dr. Lush, printed at Bombay in 1837, was read, relating to the difficulties experienced in the transport of goods from the want of roads.

Resolved,-That the above cxtract be published in this day's Proceedings. (vide p. 18)

Mr. Ashburner, who had kindly favoured the Committec with his attendance, read a paper drawn up by him, on the intcrnal trade of Bombay in cotton, salt, \&c., and on the state of the roads and modes of conveyance in general throughout that Presidency.

Resolved,- That this Paper be printed in the Proceedings of this day, (vide under) and that the thanks of the Committee to Mr. Ashburner for his communication, be recorded.

Resolved,-That a copy of Mr. Ashburner's Paper be sent to the Court of Directors, with a request that an abstract statement of the roads constructed at the several Presidencies of India within the last twenty years, be furnished to the Committee.

Memorandum respecting the Internal Trade and Communication of the Presidency of Bombay, by Geo. Ashburner, Esq.

Within the last few years the internal trade of western India has exhibited unusual signs of activity. An intercourse has long been established between the provinces on the Nerbudda and the Taptee, and the port of Bombay ; but until 1830 it was confined almost entirely to the conveyance of salt for the consumption of central India.

This article was carried on bullocks from the sea-coast to the town of Oumrawutty in Berar, a distance of near six hundred miles.

As the bullocks were sent down from Oumrawutty unladen, it occurred to an enterprising native in the year above mentioncd, to load some of them with the cotton of the country, which had bcen previously carried to Calcutta, via Mirzapore and the Ganges, and the experiment succceded so well that no less that 10,000 loads of the article were brought to Bombay the following year.

The price it then sold for ( 64 rupees a candy) seemed sufficiently remunerating; for the quantity brought to market was stcadily and rapidly increasing. The great rise, however, in the price of cotton all over the world, which took place in 1834, and 1835, and the high prices which continued last year, gave an additional stimulus to the cotton dealers and cultivators of Berar; and the result was, the importation into Bombay last year of no less than 90,000 bullock loads of 2401 bs . each, of the article from the above district.

The great fall which has since taken place in the value of cotton will no doubt check this important branch of commerce. If properly
managed and encouraged, however, there is every reason to suppose that it will nevertheless go on increasing at a steady pace. The fact is, there is no portion of the world at present which seems capable of producing cotton at so cheap a rate as central India.

The soil throughout the greater portion of the country is uncommonly rich, and its value is but trifling.

The exact amount of the assessment I have not been able to ascertain, but from all that I could learn it was not more for cotton lands than 4 annas (about $6 d$.) per bigha. In the next place labour in central India is cheaper than in almost any other portion of the world; the wages of an able bodied man being only 3 rupees per mensem. It has bcen estimated therefore that Berar cotton may be cultivated profitably for 30 rupees per candy, or for rather less than a penny a pound! Hence the only obstacle which exists to its production to a much greater, I may indeed almost say to an unlimited extent, is the difficulty of transportation from the place of cultivation to a market.

To give an idea of the extent to which this operates, it is necessary in the first place to state, that the price of transportation at present amounts to from 7 to 9 rupees per bullock load between Oumrawutty and Bombay, or allowing 3 bullock loads to a candy, to an average of 24 rupees per candy, a sum equal to 80 per cent. upon the first cost of the article. But this is not all. The time occupied on the route between Berar and Bombay is very great. A laden bullock travels only at the rate of 9 miles a day, and often from lameness, fatigue, and other causes, is obliged to remain stationary for days together. About 70 days, therefore, are required to effect the transit between the place of cultivation and the coast, and as the cotton of Berar ripens in February and March, it requires the utmost exertion to bring any portion of it to market previous to the setting in of the south-west monsoon; while it almost invariably happens that large quantities are caught on the road by the rain, and if not destroyed, are greatly damaged, by becoming wet, mouldy and black. Besides, in such cases, numbers of the cattle used for transportation are killed from overwork; as in addition to the anxiety felt to push them on to the utmost to avoid the effects of rain, the cotton with which they are laden, from absorbing quantities of moisture, becomes double its original weight, and actually crushes the animals it is upon to the ground. It frequently happens therefore, owing to this and the other causes I have mentioned,
that hundreds of their carcasses are to be met with just previous to the monsoon strewed along the paths they have traversed.

All this however, may easily be improved. The natural and obvious reniedy is a good road for wheel carriages; at present nothing of the kind exists over the greater portion of the route between the places above mentioned.
The effects which improving the means of communication in this way would have upon the trade of central India are almost incalculable. The rude carts of the country upon ordinary and very imperfect roads, lessen the cost of transportation as compared with bullocks in the proportion of two to seven,* and admit at the same time of double the speed attainable by the latter.

Were, therefore, the trade of Berar to remain stationary instead of improving, as it might very reasonably be expected to do, by the construction of a good road to the sea-coast, the first effect of such a measure would be to lessen the cost of transportation five-sevenths upon the amount of the produce sent to and from that and the neighbouring provinces, which was last season estimated in round numbers at


But, instead of estimating the probable saving upon this immense traffic at five-sevenths, suppose, to be within bounds, that it is taken at only one half. The result. allowing 8 rupees as the average cost of transportation for a single bullock load would be a reduction of expense of sixteen lakhs of rupees per annum, or in round numbers of $160,000 l$., and this, it is to be borne in mind, would be upon one route alone! At the same time such a saving would probably be the least of the advantages resulting from the work in question. By lessening

[^111]the expense at which the produce of central India, on the one hand, and of the coast on the other, could be carried to a market, it would increase the demand for it to a proportionate extent. This again would stimulate cultivation and production, and, as the population of the country in question is enormous, it is difficult to assign limits to the increase of trade that would arise from conferring upon it merely the ordinary means of intercourse in all civilized states, of which hitherto it has unfortunately been in a great measure deprived.

It may be as well, however, to shew the productive powers of the eountry more clearly, to instance the increase which has lately taken place in the amount of cotton exported from Bombay. From 1828 to 1835 the exports averaged 178,000 bales a year, and remaincd nearly stationary. But the high prices of the latter year led to more extensive cultivation, and, notwithstanding numerous obstacles to production, the Presidency of Bombay last year produced and exported no less than 290,000 bales of cotton, being an increase of 112,000 bales within the year. Some portion of this increase no doubt is attributable to an unusually good season, but by far the largest share arose, as the reports of the revenue collectors shew, from extension of cultivation alone. Here, then, is a specimen of what India is capable of doing under favourable circumstances, and there ean be no question whatever that the production of cotton would, with good roads to the interior, go on increasing as rapidly as it increased during the last twelvemonth; for the stimulus to cultivation would be as great from decreased expenses as it has lately been from increased prices.

Thus with proper management we might reasonably expect to see the exports of the country in this staple alone, swelling at the rate of 100,000 bales per annum, and amounting probably at no distant period to a million of bales. And what would be the consequence in oth\&r respects? Besides benefitting the revenue, and inuproving the condition of the people of India, such a trade would give employment to a vast amount of British shipping, (400,000 tons,) at the same time that it created a greater demand for the manufactures of the mother country.

Upon the trade in salt, the effect of improved means of communication probably would be equally great. The first cost of this article is but trifling, amounting in general, to less than an eighth of the sum paid for its transportation to the market of Oumrawutty. Any thing, therefore, which reduced the latter, would, to almost an equal extent,
affect the price of this great necessary of life, to the consumer in central India, who at present, from being forced to supply himself with it, by means of a slow and laborious land carriage of 600 miles, finds it one of the most expensive articles of food. There can be little doubt therefore, that a reduction of fifty per cent. in its price, which, I am confident might be effected by good roads, would at least double the quantity consumed, and that instead of the trade in it being limited to 200,000 bullock loads, it would soon exceed twice that amount.
Nor is it in cotton and salt alone that an improvement of this kind would take place. Every description of raw and bulky produce, such as wool, hemp, linseed, and dye stuffs, suffers in an equal degree by the present state of things ; the effect of which in many cases, may be estimated as doubling and trebling their price, between the place of cultivation and the sea coast, where a large market for them alone exists. Great, therefore, as the field unquestionably is for improvement in India in the mode of cultivating and preparing its products for market, and beneficial as the introduction of new articles of produce, suited to the wants of Europe, as well as to those of the native population, would be, I cannot but think that the simplest, surest, and most important step towards bettering the condition of the people, and increasing the resources of the country, will be facilitating the means of internal traffic.
G. A.

> London, May 25 th, 1837.

## Extract from Pamphlet by Dr. Lush, on the Cultivation and Preparation of Cotton.

Packing and transport of cotton.-The Guzerat districts enjoy facilities of transport unknown to the southward, there being not only convenient water carriage, but as the country is flat, carts are the common transport of the country, notwithstanding the absence of made roads. This is accompanied by the repacking system, by which the cotton is screwed into a smaller compass and the cost of transport lessened. But in the Southern Maratha country, and in all those distant provinces, where, from the hilly nature of the surface, carts cannot travel many miles without made roads, the only carriage known
is the back of the bullock and buffalo; a mode slow, expensive, and injurious to the cotton. Considering the expense of the land carriage of lonscly packed cotton, of which each bullock carries ten maunds only, the bullock-hire (though moderate at twelve rupecs per candy for about 100 miles,) it is really wonderful how the cotton of some distant countries ever reaches the Bombay market at all.* It now comes under the temptation of very high prices. But should cotton fall to one hundred rupees the candy in Bombay, how many of these provinces would find their trade stopped and their cotton cultivation checked? It would be needless (for it has been tried without success) to establish repacking screws in parts of the country where carts are not the ordinary carriage of bulky merchandise. Your cotton would be screwed and carts might be hired, but they would be the carts ordinarily used for agricultural purposes, and the bullocks also taken from the plough, to the great hindrance of farming business, for which you must pay accordingly. Well-made roads through distant and difficult countries must precede any other step in the encouragement of the trade in cotton. Should a considerable fall, even though temporary, be experienced in the price of cotton, before these increased facilities can be afforded, we shall hear of cotton remaining on hand in all the distant districts, land thrown out of cultivation, and heavy remissions of revenue to the ryots.

It would be tedious to trace out all the inconveniences of the present mode of transport. Let any one picture to himself, droves of brinjaree bullocks, carrying each a few maunds of cotton, moving through the black plains in a year of famine, in the attempt to convey to the coast the abundant crop of cotton of the year preceding, obliged to carry their fodder as well as their cotton bags. Contrast this with a state of things which we all must wish to see, well constructed roads, fit for substantial carts, carrying from the coast or the more favored inland districts, grain to the famished; and returning at less than half the present cost, laden with "repacked" cotton i® far better condition than any now received, unless from the more favored districts to the northward. At this moment there is not a road from any cotton mart under this presidency to any commercial port on the coast.

[^112]Returns of Exports of Cotton, Opium, and Wool, and of the Tonnage inwards and outwards, with Imports and Exports of Treasure at Bombay, received from Bomanjec Hormarjee, Esq.

## COTTON.

|  | To China. | To Great Britain. | Total |
| :---: | :---: | :---: | :---: |
| 1828 | Bales. 103,533 | Bales. S4,604 | Bales. 18S, 137 |
| 1829 | 87,927 | 38,987 | 126,914 |
| 1830 | . 117,268 | 37,295 | 154,563 |
| 1831 | . 122,264 | 81,434 | 203,698 |
| 1832 | 115,094 | 98,631 | 213,725 |
| 1833 | . 109,741 | 94,152 | 203,893 |
| 1834 | . 120,623 | 82,082 | 202,705 |
| 1835 | - 53,771 | . 103,707 | 157,478 |
| 1836 | . 121,121 | 168,961 | 290,082 |
| 1837. | d at |  | 300,000 |

## OPIUM.

| In 1829 | . . . 3,420 |  | Chests. |
| :---: | :---: | :---: | :---: |
| * 1830 | 3,506 | ............ | do. |
| * 1831 | . . . . . . . . . . 4,472 |  | do. |
| * 1832 | . 10,105 ${ }^{\frac{1}{2}}$ |  | do. |
| " 1833 | 6,937 |  | do. |
| " 1834 | . . . . . . . . . . . 11,206 |  | do. |
| " 1835 | . 8,785 |  | do. |
| * 1836 | . . . . . . . . . . . 16,234 $\frac{1}{2}$ |  | do. |
| " 1837. | Estimated at 18,000 | Chests. |  |

Wools for Great Britain.

|  | Bales. | Cwts. |
| :---: | :---: | :---: |
| 1833 | 106 | 303 |
| 1834 | 439 | 1,719 |
| 1835 | 2,290 | 6,363 |
| 1836 | 5,125 | 14,645 |


|  | 1831. | 1832. | 1833. | 1834. | 1835. | 1836. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inwards | 60,379 | 56,051 | 71,929 | 69,503 | 73,175 | 102,571 |
| Outwards | 63,510 | 63,200 | 62,852 | 87,930 | 74,138 | 104,424 |


|  | 1832. | 1533. | 1834. | 1535. |
| :---: | :---: | :---: | :---: | :---: |
| Inports . . . Treasurc. Rs, | 54,79,600 | 119,90,127 | 110,30,696 | 131,91,557 |
| Exports | 26,45,685 | 19,50,512 | 16,17,978 | 15,43,414 |

## ROYAL ASIATIC SOCIETY.

## PROCEEDINGS

OF THE

## COMMIT'TEE of AGRICULTURE and COMMERCE.

## June 16, 1837.

A Committee was held this day at one oclock.
Present:-Sir Charles Forbes, Bart. ; the Right Hon. Sir Alexander Johnston ; the Right Hon. Sir Gore Ousely, Bart. ; the Right Hon. Holt Mackenzie ; the Right Hon. Henry Ellis ; Colonel Briggs; William Newnham, Esq, ; Professor Royle ; Colonel Sykes ; John G. Malcolmson, Esq.; Captain Harkness.

Sir Charles Forbes, Bart., in the Chair.
The Minutes of the last Committee were read and confirmed.
Read a letter from the Right Hon. Lord Glenelg, Secretary of State for the Colonial Department, complying with the wishes of the Committee as explained in their Minutes of the 26 th of May last; and forwarding a volume of papers connected with the plan proposed by Sir Alexander Johnston, for the cultivation of the waste lands of Ceylon.

Resolved,-That the thanks of the Committee be returned to Lord Glenelg for his kind attention.

Resolved,-That the Right Hon. Sir Alexander Johnston be requested to conduct the communication with the Right Hon. Stewart Mackenzie, in the name of the Committee, respecting the present condition and improvement of the Agriculture of the island of Ceylon.

Read a letter from John Macvicar, Esq., acknowledging his election into the Committee.

Read a letter from William Jerdan, Esq., enclosing an Extract from the Ceylon Gazette.

Resolved,-That the thanks of the Committee be communicated to Mr Jerdan.

Read a letter from Captain H. Drummond, of the Bengal Native Cavalry, stating that he is about to depart for India, to be employed in examining the mineral resources of the Himalaya Districts ; and expressing his wish to be placed in communication with the Committee, with the object of promoting its views, as regards the part of India to which he is proceeding.

Resolved,-That Captain Drummond be informed the Committee will be happy to communicate with lim on all subjects connected with the objects it has in view ; and that copies of all the Proceedings of the Committee be transmitted to Captain Drummond.

The Committee, understanding that Dr. Spry had been some time in attendance with the expectation of an interview; but that lie had left the house :

Resolved,-That the Committee much regret not having had the pleasure of an interview with Dr. Spry, on his return to Bengal ; that a letter be addressed to him to this effect; and that in accepting his offer to promote the views of the Committee in the part of Bengal to which he is proceeding, as recorded on the Minutes of a former day, the Committee feel assured they may anticipate much valuable aid from his exertions.

A Paper, on the cultivated Oil and Cordage Plants of the Dekhan, by Lieutenant-Colonel Sykes, was read to the Committee, and ordered to be printed in this day's Proceedings. (Vide p. 22.)

Resolved,-That the thanks of the Committee to Colonel Sykes, be recorded.

## Account of the cultivated Oil and Cordage Plants of Dekhan, by Colonel Sykes, F.R.S.*

Kurdee, Kurtuh, Koosoom ; Carthamus persicus. Flowers not used as a dye, sown with shaloo (Andropogon sorghum) in the proportions of 1 to 8 , returns 53 for 1 ; ripe the end of March. The seeds produce an edible oil, which is esteemed when fresh; it is in use also as a lamp-oil. Forty-eight seers of seed produce $7 \frac{1}{2}$ seers of oil, or more than 15 per cent. weight against bulk. The price of the seed in the Serroor market, in August 1825, was 20 seers bulk for two shillings; but this was dear. Price of the oil at the same time $3 \frac{3}{4}$ seers, or about 7 lbs . avoirdupois, for two shillings; same name of Koosomb to both species. In times of scarcity, the seeds are eaten whole as food, also the leaves as greens. The oil-cake is highly nourishing to milch cattle. Price, 80 seers, or about 160 lbs. avoirdupois, per two shillings.

This article is not in any Commercial Price Current.
Juwus, Atahsí, Teesee; Linum usitatissimum. Flax, cultivated only for its oil, used in lamps. The return about 20 for 1 . In a stone-mill, 4 seers measure of seed produce one of oil. Price of the seed in Poona, January 1825,

[^113]sixteen seers for two shillings; this was dear. Oil used medicinally. Oilcake given to cattle. The seed itself eaten by man, in condiments, made up of the Kuree Neemb (Bergera Kœnigii), capsicums, \&c.

This article is not in a late Bombay Price Current.
Moharee, Rajeeká, Raee; Sinapis racemosa. Two other kinds of mustard-seed are also cultivated; Raee Pandree, or white mustard, and Manjurya, black mustard-seed. As a field produce, these kinds are cultivated for their edible oil, used also medicinally for rheumatism; but almost every part of the plant is used either as greens or condiment. Price of moharee at Serroor, in August 1825, 8 seers, or 16 lbs ., for two shillings; the other kinds about 25 per cent. cheaper.

This article is not in a late Bombay Price Current.
Yerund-tambra, Wahyágrah-dallah, Erand; Ricinus communis. Common red castor-oil, a perennial plant of 20 feet high, but is cut down yearly. The seeds are used to produce a lamp rather than a medicinal oil. I found 4 seers measure to produce 1 seer, or 2 lbs . weight, of oil, or 25 per cent. The leaves are in universal use for poultices for Naroo or Guinea worm, inflammation of the eyes, severe head-ach, bruises, \&c. The flowers are given to women four months gone with child, and the leaves are used as a febrifuge.

Several species of Ricinus are cultivated in Dekhan.
In a Bombay Price Current of the 28th January, 1837, castor-oil is stated at 4 rupees the maund of 28 lbs., or $3 \frac{1}{2} \mathrm{lbs}$. for a shilling.

Teel, Teelhah, Til; Sesamum orientale, or indicum. There are two varieties, the white seeded, and that with blackish-red seeds. Although not a bread grain, Teel is used for many economical purposes. The seed is too oily to be made into flour, but it is toasted and sprinkled on bajree (Panicum spicatum) bread, indeed, upon any kind of bread. It is used in many compound dishes; various sweetmeats are made with it, but it is principally esteemed for its valuable and agreeable oil. Three seers bulk of the seed produce one seer weight of oil, or $33 \frac{1}{3}$ per cent. This oil is preferred in cooking to all others. I say nothing of the extensive use of the seed and oil in religious ceremonies. The oil-cake is eaten by the farmers with salt and pepper. Price in the Poona market, in January 1835, 5 seers per rupee. In October of the same year I counted 103 capsules on one plant, averaging 68 seeds each, giving a return of 7208 for one.

This valuable seed is not in a late Bombay Price Current.
Karleh, Kalee-Teel. Verbesina sativa. From its being frequently called Kaleh-Teel (black sesamun), it is confounded by Europeans, not botanists, with the sesamum, but it is an entirely different plant. Its seed produces an edible oil, which is the great substitute for Ghee (clarified butter), with the poorer classes of the cultivators and the population generally; 12 seers of seed in bulk in a stone mill produce 3 seers, or 6 lbs., of oil in weight, or 25 per cent. Price at Neelsee in April 1825, 20 seers measure for two shillings. The oil-cake is in high esteem for milch-cows; price at Poona in January 1825, 60 seers, or 120 lbs ., for two shillings. Feverish and asthmatic persous, and those whose digestion is not strong, cannot eat the karleh oil
with impunity. As an edible grain, karleh is only used in acid and pungent condiments.

Unnoticed in Price Current.
Mohla, Maddooddoomah, Mohha; Bassia latifolia. A handsome forest-tree. The well-known ardent spirit called mowra, is obtained from the inflated fleshy tubes of the corolla. The dried flowers are an article of trade ; they lave a slight resemblance to the dried seedless grape, and are not disagrecable in flavour. The seeds of the fruit produce a thick edible oil. The bark of the tree is used in olttaining a brown colour. Wood of the tree durable, and compact.

The article is unknown in Price Currents.
Cliar, Pceyalah, Peeyal; Chironjia sapida. A forest tree. The seeds of the fruit are much esteemed for their fine flavour. A medicinal oil is extracted from them which is considered efficacious in bile and phlegm. Price of the kernels or seeds at Poona, in January and February 1825, 4 pounds, avoirdupois, for two shillings.

Unnoticed in Price Currents.

## Cordage Plants.

Ambaree; Hibiscus cannabinus. This plant produces an oil-seed; but it is principally cultivated for its bark for cordage. The plant sometimes attains the height of 12 feet; usually 5 or 6 . Bark separated by steeping. The bark is called waak. Price at Poona, March, 1825, best kind, 10 lbs. for two shillings, and sceond kind, 12 lbs . The oil from the sced is scarcely deemed edible ; in pressing it, thercforc, the seed is frequently mixed with the seeds of the verbesina and linum. Price of Ambaree sced at Ambagaon, February 1826, 120 lbs . for two shillings. Price of the bark, or waak, 16 lbs. for two shillings. The length of the fibre is of course proportioned to the growth of the plant. Both cordage and twine made from it are very strong. At present, very little more is cultivated than is required by the farmer himself, for his own use.

Unnoticed in Price Currents.
Taag, Shunum, Sun ; Crotolaria juncea. Bengal Hemp. The stalks are wand-like, and 5 or 6 feet long. One hundred bundles, each bundle containing from 400 to 450 stalks, produce from 12 to 16 lbs . of fibre, which, in January and February 1826, sold at the rate of 12 lbs . for two shillings. During the rains, the farmer and his family make their own twine, which they weave into picces of very coarse canrass, called gohnpaat, from 30 to 40 feet long, and 10 inches wide. These are made into canvass bags, called gohnces, for the conreyance of grain on the backs of bullocks; into corerings for the saddles of camels; into large sheets, in which the baggage is tied up on the backs of elephants and camels; into pack-saddles, \&c. \&c. All the writing paper in common use in Dekhan, is manufactured from old and worn out grain-bags, and other articles made from the fibres of Taag.

In a Bombay Price Current, of January 28, 1837, Gujerat hemp is stated at 68 rupees the candy of 784 lbs ., or $5 \frac{3}{4} \mathrm{lbs}$. for a shilling.

Cocoa-nut oil being nowimported into England, in considerable quantities, I shall only express my opinion, that its present retail price, of $4 s .6 d$. per gallon, weighing 9 lbs., must give an enormous profit, as the cost-price, at Bombay, on the 28 th of January, 1837, was $1 s .9 \mathrm{~d}$. for 18 lbs . avoirdupois; and in Ceylon it is much less. In fact, the present charge upon the costprice, is 312 per cent. I must express my regret also, that it is not more generally used in England; for, instead of the detestable smell of fish-oil, it has rather an agreeable odour; and it is readily consumed in open glass vessels, with floating, or standing wicks, whatever the temperature of the air may be.

At a future period, I shall be happy, if it be desirable, to give an account of the plants producing aromatic seeds, which are generally cultivated in Dekhan, and the seeds are very cheap. Also an account of the plants used in dyeing, tanning, wild cordage and oil plants, \&c.

I have purposely excluded from the above accounts all systematic details respecting the cultivation, time of flowering, returns, \&c., of the various plants; believing that such details could not be of any interest to the merchant or manufacturer in Great Britain. If it were desirable, I could furnish the medicinal properties of the plants, according to the Hindoos.

The first name of each plant is in the Mahratta language, the second name in Sanscrit, the third in Hindostanee, and the fourth is the botanical name.

The standard measure of capacity in the Dekhan is called an adholee, of 2 seers. Of small grained rice it contains $4 \mathrm{lbs} .12 \mathrm{oz} .7 \mathrm{dwts} .22 \frac{\mathrm{I}}{2}$ grains, avoirdupois weight. It contains a weight of water, at a temperature of $75^{\circ}$ Fahr., of $5 \mathrm{lb} .3 \mathrm{oz} .3 \mathrm{dwts} .5 \frac{1}{2}$ grains, or 144.4 cubic inches; and at a temperature of $60^{\circ}$ Fahr., it contains 48 per cent. less than an imperial gallon, or very nearly two quarts. Rigidly the seer of capacity is 4.17 per cent. larger than an imperial quart. Measures of capacity and weights, however; differ a good deal in different market-towns. The standard seer of weight is equal to 80 Arkoosee rupees, or 1 lb .15 oz .8 dwts. $18 \frac{8}{8}$ grains, avoirdupois; but the seer commonly in use weighs only 76 rupees.

## ROYAL ASIATIC SOCIETY.

## PROCEEDINGS

OF THE

## COMMITTEE of AGRICUL'IURE and COMMERCE.

## August 5, 1837.

A. Committee was held this day at one oclock.

Present:-The Right Hon. Sir Alexander Johnston; Sir Charles Forbes, Bart.; Sir Henry Willock; W. Jerdan, Esq.; Captain Jervis; L. H. Petit, Esq.; Colonel Sykes.

The Right Hon. Sir Alexander Johnston in the Chair.
The Minutes of the last Committee were read and confirmed.
The Right Hon. Sir Alexander Johnston informs the Committee that, in obedience to their wishes, he has conferred at considerable length with the Right Hon. Stewart Mackenzie, who is going out as Governor of the Island of Ceylon, upon the best measures to be adopted for improving the Agriculture and Commerce of that island; that, in order to put Mr . Mackenzie in possession of his views upon the question, he has given him a paper, of which the following is a copy, containing an account of what he himself did so far back as 1809 , and what he now advises Mr. Mackenzie to do upon the subject.
"Sir Alexander Johnston, having, in 1807, while Chief Justice and First Member of His Majesty's Council, at the request of the then Governor of Ceylon, Sir Thomas Maitland, made a circuit through every part of the British territories on that island, for the purpose of obtaining accurate local information upon every subject connected with the interests of the island, was, in 1809, sent officially to England by Sir Thomas, in order that he might lay before His Majesty's ministers, his (Sir Alexander's) reasons for advising a variety of different measures, which he had suggested to the local government as necessary to improve the condition of the natives, and the agriculture of the country.
"The following are the measures which he submitted to the Marquis of Londonderry, the then Secretary of State for the Colonies, as necessary to improve the Agriculture of the island.
"1. That every possible encouragement be held out, both by the
government in England, and the government on Ceylon, to all capitalists, as well Europeans as natives of India, of every caste and religious persuasion, in order to induce them to embark their capital in the repair of all the tanks, great and small, and all the water-courses which were formcrly in a state of repair, but which are now in ruins; and thereby again, bring into cultivation all those lands which are now lying waste and unproductive, but which were in ancient times highly cultivated, and produced rice enough, not only to supply the inhabitants of the island itself, but also, in years of distress, to afford considerable aid to the inhabitants of the southern part of the Peninsula of India.
" 2 . That all the restrictions which now prevail on Ceylon against allowing Europeans to hold lands by grant from the local government, or to acouire them by purchase or gift from individuals, in perpetuity, be annulled, and that Europeans as well as natives, be allowed to acquire and hold lands without any restriction or limitation whatever ; and that the local government be authorized by Parliament to grant all the lands over which they have any control, on the most advantageous terms which can be devised for the individuals, whether Europeans or natives of India, who may apply for them.
" 3 . That an order of nobility, with such distinctions and privileges attached to it, as may be the most gratifying to the fcelings of the natives of India, be established by His Majesty, for the purpose of rewarding all persons, Europeans as well as natives of India, who may either bring a certain quantity of waste land into cultivation, or introduce with success any measure which lias a direct tendency to improve the Agriculture of the country; that these honours be conferred by the Governor at a public meeting of the natives from every part of the island, to be held annually, for the express purpose of ascertaining the quantity of waste land which has been brought into cultivation during the year, the particular merits of each person who claims a reward for his exertions in favour of Agriculture during that year, and the different measures which ought to be adopted, either by government or by individuals, for the purpose of increasing and improving the cultivation of the country.
"4. That a detailed account of the honours conferred upon each individual, and of the reasons for conferring them, be made public, not only throughout the island of Ceylon, but throughout every part of the British possessions in India.
" 5 . That models of all the machines, tools, and implements, which have been found in different parts of the world to be of use in Agriculture, be procured at the expense of government, and be exhibited and explained at the above meeting, by persons employed by government, to all the natives who may attend that meeting, from every part of the island, in order that they may, from their local knowledge, be enabled to decide which, if any, of the machines, tools, or implements, may be of use to Agriculture in their respective provinces.
"6. That a provincial experimental farm and botanical garden be established in each of the provinces of Ceylon; and that a central experimental farm and botanical garden be established at Colombo, the former being subordinate to, and in correspondence with, the latter.
" 7. That reports be drawn up at the expense of government, of all the lands which are cultivated, and of all those which are uncultivated, in each province, with a topographical map of the province annexed to it, specifying the nature of the lands which are uncultivated, whether they were formerly cultivated, and if so, why they are at present uncultivated; the number and situation of the tanks or water-courses by which these lands were formerly irrigated; the sum of money it would cost to repair the tanks and water-courses; the rivers, if any, in each province, which were ormight be made available, either for the purpose of irrigation, or for that of water-carriage; the number and nature of the different descriptions of trees which grow in the province; the purposes to which the wood of each description of tree may be applicable; the mode in which, and the expense at which, the wood may be conveyed from every part of the province to the sea-coast; the nature of the climate,-its probable effect upon the constitution of a native of Europe, or upon that of a native of Asia; the extent and nature of the population of the province; the probable prospect of increasing it by the introduction of people from different parts of Asia; and every other circumstance which may be necessary to enable the people of Europe, or the people of Asia, to form an opinion as to the advantage or disadvantage of embarking their capital in speculations for the improvement of the Agriculture of the province.
" 8. That the government-monopoly of the cultivation of, and trade in, cinnamon be abolished, and that every person, European or native, on the island, be allowed to cultivate and trade in cinnamon.
" 9 . That the growth of coffee and sugar-cane, and the manufacture of sugar, be encouraged by government in every way.
" 10. That an agricultural code of law, applicable to the situation of the country, and the circumstances of the natives, be framed, for the guidance of all those who may be engaged in, or connected with, the Agriculture of the country. That this code be administered by courts constituted for the purpose, in which the parties interestcd in a suit may obtain redress with the least possible expense, delay, or inconvenience; and in which every man connected with the agriculture of the country may be certain of being efficiently protected against every description of oppression.
" 11. That the power of the local governor to send Europeans, or any other individuals, out of the island without trial be annulled; and that it be enacted by an Act of Parliament, that no European, or other person, be sent out of the island on any pretence whatever by the governor, except he be first tried by a court of justice, and convicted by a jury of some specific offence, to which the punishment of banishment is attached by law.
" 12. That every description of slavery, whether domestic or attached to caste, be abolished.
"13. That the right exercised by government, of forcing particular classes of natives to work at a fixed price for their labour be abolished.
" 14. That every native of the island, as well as every European, have a right, subject to certain qualifications, to sit upon juries, and to be tried by a jury of his own countrymen for any criminal offence with which he may be charged.
" 15. That a Special Act of Parliament, similar in principle to the Habeas Corpus Act in England, be made for protecting all Europeans, and all natives on the island of Ceylon, against any illegal imprisonment or detention whatsoever.
" 16. That a Constitution, also similar in principle to the British Constitution, but so modified as to suit the religious and moral feelings of the natives, and the peculiar circumstances of the country, be guaranteed, by an Act of Parliament, to all the inhabitants of the island.
" 17. That measures be taken for forming a respectable constituency amongst the natives of the country in each province, who shall have the right of sending one or more of their own countrymen, according to their numbers, and other circumstances, to be arranged hereafter, as their Representatives in a Legislative Assembly, which shall be assembled in a central part of the island, to legislate according to rules, which shall be hereafter fixed by themselves, for the inhabitants of the island.
" 18. That a general system of education, including such branches of mechanics and chemistry as are applicable to the purposes of agriculture and manufactures, be established throughout the island.
" 19. That all the restrictions which are now in force against Catholics be abolished, and that they be put precisely on the same footing as Protestants.
" 20. That no more persons be appointed to the civil service; and that at the expiration of the time of service of the present civil servants, they be allowed, if they wish it, to retire on their respective pensions.
" 21 . That every native, as well as every European, on Ceylon, be eligible, if properly qualified, to holl any of those civil offices which have hitherto been held by civil servants alone.
" 22. That the ports of Point de Galle, Jaffna, and Trincomalee, be declared free ports.
" 23. That the narrow passage in the Gulf of Manar, called the Pombaum Passage, be deepencd, so as to admit of resscls drawing from ten to twelve feet water, to pass through it without unloading.
[The objeet of this measure is to enable trading vessels from any part of the Aralian and Persian Gulfs, or of the Coast of Malabar, to sail directly to and from Jaffina and Trincomalee, without the danger or expense of going round Point de Galle.]
" 24. That the entrance into the Cochin River, on the Malabar Coast, be improved so as to admit of large vessels coming into that port. That the Admiralty be urged to build ships of war there, the price of building them, owing the quantity of teak-wood in the neighbourhood, being much less than in England or at Bombay; and that a water-communication be opened between the coast of Malabar and that of Coromandel, through the break in the Ghauts called the Palighatcheri Pass, by uniting the river Paniyani, which flows into the sea on the coast of Malabar, with the rivers Caveri and Colerun, which flow into the sea on the coast of Coromandel.
[The oljeet of this measure is to revive the trade whiel formerly prevailed between every part of the Gulfs of Arabia and Persia, and the Southern Peninsula of India; and which trade was dircetly the cause of a very considerable trade between the Southern Peninsula of India and the northern part of the Island of Ceylon, and, indirectly, the eause of the then improved state of the agriculture of that part of the island.]
" 25. That an Agricultural and Commercial Committee, to consist of persons acquainted with the Island of Ceylon, and of merchants and capitalists, interested in the agriculture and trade of that island, be formed in England, for the purpose of improving the agriculture, manufactures, and trade of Ceylon, and protecting the rights, privileges, and interests of all the merchants and capitalists who may be engaged in the agriculture, manufactures, and trade of that island.
" The late Marquis of Londonderry, who was Secretary of State for the Colonies in 1809, when Sir Alexander Johnston reached England, agreed in opinion with Sir Alexauder Johnston as to the policy of all these measures, and would, had he continued in office, have authorized the local government to carry the whole of them into immediate effect. The Marquis having, however, soon after given up office, and been succeeded by Lord Liverpool, his policy was not acted upon to so great an extent as was originally intended by him; and the following only of the measures submitted to the Marquis of Londonderry, in 1809, by Sir Alexander Johnston, have been as yet carried into effect.
"The measure for authorizing every native of the island to sit upon a jury, and to be tried by a jury of his own countrymen, for any criminal offence with which he may be charged; that for freeing Catholics from the legal disabilities under which they liad previously laboured on account of their religious persuasion; that for abolishing all forced labour, and domestic slavery; that for abolishing the restrictions against Europeans holding lands under grant, gift, or purchase, in perpetuity ; and that for encouraging the growth of coffee and sugar-cane, and the manufacture of sugar, and of abolishing the monopoly of cinnamon.
"Sir Alexander Johnston, since he proposed the various measures which have been mentioned to the Marquis of Londonderry, has devoted his attention, for eight-and-twenty years, to the affairs of India in general and to those of Ceylon, and is still decidedly of opinion that the whole of those measures ought to be carried into effect; and should Mr. Stewart Mackenzie be of the same opinion with him after his arrival on Ceylon, he would advise him to take the necessary steps, without delay, for carrying into effect such of them as have not yet been adopted; and with a view of enabling His Majesty's Ministers, and the British public, to become acquainted with the nature, and to appreciate the value of the lands at the disposal of the Ceylon government, to cause to be made out, and forwarded to His Majesty's Ministers, for the information of the British public, such reports* respecting the waste lands in each of the provinces of Ceylon, as Sir Alexander advised to be done in 1809."

Sir Alexander Johnston having read the above paper to the Committee, adds, that the details of these different measures are more fully explained, first, in the copies of the reports made by Capt. Schneider, of the Ceylon Engineers, in the years 1807 and 1808, the originals of which Sir Alexander Johnston brought to England with him in 1809, and deposited in the office of the Secretary of State for the Colonies; secondly, in the correspondence between Lord Liverpool, Sir Joseph Banks, and Sir Alexander Johnston,

[^114]in 1810, on the subject of establishing a Royal Botanical Garden on Ceylon, which, on his suggestion, was established at Colombo, in the ycar 1811, for the purpose of aiding the agricultural improvements which were about to be made on the island; and, thirdly, in the published evidence given by Sir Alexander Johnston, before a Committee of the House of Commons in 1832, and the papers delivered by him to the Committee at the same time. (Vide Minutes of Evidence, Affairs of the East India Company, Judicial, 1832.)

The Committee approved the steps taken by the Right Hon. Sir Alex. ander Johnston in this matter, and

Resolved,-That the paper, and what he said upon the occasion, be inserted in the Proceedings of this day.

Read a letter from Lieut. Wellsted, on the subject of the Shennah Moss, of the Island of Socotra, which was brought to the notice of the Committee on a former day, (vide Proceedings, p. 12,) in reply to a letter from the Secretary, requesting him to communicate any information he may be possessed of on the subject, and to oblige the Committee by furnishing specimens of the moss. Lieut. Wellsted stated that he had little further to communicate; that there was found a Red Moss on the same island, as well as the Gray Moss he had reported upon, but that he had no specimens of either. He suggested that the Committce should address a letter to Admiral Sir Charles Malcolm, at Bombay, under whose directions vessels are constantly visiting the island, requesting him to direct a collcetion of specimens of those Mosses to be made for the Committee, and to furnish any further particulars respecting them.

Resolved,-That a letter be addressed to Admiral Sir C. Malcolm, as suggested by Lieut. Wellsted.

Read a letter from the Treasurer of the Committee, dated the 17 th of June last, reporting the transfer of $£ 250$, out of the donation of Sir Henry Worsley, to the credit of the Committee; also reporting that he has carried to the same account the sum of $£ 12318 s$., the amount of subscriptions and donations received.

The following letter, from the Secretary to the East India Company, in reply to a letter from this Committee, transmitting a copy of Mr. Ashburner`s paper read on the 26th of May last, and requesting to be furnished with a statement of the roads constructed in India within the last twenty years, as per resolution of that date, (see p. 13,) was read to the Committee.
" SiR,
"East India House, 29th June, 1837.
"I am commanded by the Court of Directors of the East India Company to return the acknowledgements of the Court for the memorandum by Mr. Ashburner, transmitted with your letter of the 13 th instant, which the_Court propose to bring to the notice of the Government of India. And

I am further directed to inform you, with reference to your request, to be furnished, for the use of the Committee of Agriculture and Commerce of the Royal Asiatic Society, with an abstract statement of the roads which have been constructed at the several Presidencies of India, within the last twenty years, that the Court regret that no such statement as is required by the Society exists at this House, and that the preparation of such a statement here would be a work of much time and labour.
$"$ I am, Sir, \&c., \&c.,
"(Signed) James C. Melvill."
" To H. Harkness, Esq."
The Secretary reported that, in obedience to a resolution of the 26 th of May last, a paper of instructions to the Collectors of Cotton Soils, and a list of inquiries on the subject of Cotton cultivation, had been prepared and forwarded to His Britannic Majesty's Consuls at Savannah and New Orleans, through the medium of the Secretary of State's Office.

## APPENDIX.

## PROCEEDINGS

OF THE

## ROYAL ASIATIC SOCIETY.

## SATURDAY, DECEMBER 3, 1836.

A General Meeting of the Society was held this day ; Major General Sir James Law Lushington, K.C.B., in the Chair.
The Minutes of the last Meeting were read and confirmed.
The following donations were laid upon the table:-
From W. H. Wathen, Esq.
A Hindú Drama in the Sanskrit language, entitled Jánaka Parinaya, written by Rambladra Dikshita, a learned Brahman, who Hourished about the sixth century. MS., beautifully written on English paper, with finely executed illustrative drawings, coloured.

A Grammar of the Prakrita language. Sanskrit MS.
Both these works were accompanied by analytical notices, by Mr. Wathen.

From Captain R. Cogan, M.R.A.S.
A Chart of the Red Sea. Two sheets; mounted on rollers.
From the Rev. C. Gutzlaff.
A Chinese Map of Pekin ; on rollers.
From the Author.
Topographical Survey of Thebes. By J. G. Wilkinson, Esq. 1830. Six Sheets. fol.

From Manockjee Cursetjee, Esq., M.R.A.S.
A Lithographed Edition of the Vendidad. fol.
From Sir Graves C. Haughton, M.R.A.S.]
Copy of a Report to the Court. of Directors on the importance of the Study of Sanskrit, \&c.; with other documents on the same subject. MS. 4 to.

Catalogue of Oriental MSS. in the College of Fort William.
Translation of a Treaty with Tipú Sahib.
A Code of Laws, as established at Fort Marlborough. 1817. 4to.

From the Translator.
Grammaire Turke, \&c., par A. I. Davids; traduit de l’Anglais par Madane S. Davids. A Londres, 1836. 4to.

From the Author.
Mémoire sur Deux Inscriptions Cunéiformes trouvées près d'Hamadan. Par M. Burnouf. Paris, 1836. 4to.

From the Asiatic Society of Bengal.
The Mahábhírata. Vol. II. Sansc. Calc., 1836. 4to.
Journal of the Society, Nos. 50 to 53 , inclusive.
From the Zoological Society of London.
Its "Transactions." Vol. II. Part II.
From the Imperial Academy of St. Petersburg.
Mémoires de l'Académie Impériale, \&c. VIme Série. Tome III., Liv. 2-5 ; and Tome IV., Liv. 1. St. Petersburg, 1834-5. 4to.

Recueil des Actes de la Séance Publique de l'Académie Impériale, \&c. St. Petersburg, 1836. 4to.

From the Royal College of Surgeons.
Descriptive Catalogue of the Plysiological Series of Comparative Anatomy, contained in the Museum of the Royal College of Surgeons. Vol. III. Part II. 4to. 1836.

From the Royal Society of London.
Philosophical Transactions for 1836. Part I.
Proceedings of the Royal Society. 1835-6.
Fron the Linnaan Society of London.
Its "Transactions." Vol. XVII. Part III.
From the British Association for the Advancement of Science.
Report of the Fifth Meeting of the British Association, \&c. Lond., 1836. 8 ro.

From the Agricultural and Horticultural Society of India.
Its "Transactions." Vol, II. Calc., 1836. 8ro.
From the Royal Gengraphical Society.
Its "Journal." Vol, VI. Part II.
From the Geographical Snciety of Paris.
Bulletin de la Société de Géographie, \&c. Tome V. Paris, 1836. 8ro.
From the Academy of Sciences at Dijon.
Mémoires de l’Académie, \&c. 1835. 8ro.
From the Devon and Exeter Institution.
A Catalogue of the Library, \&e. 8vo. 1836.

From the Bahama Society for the Diffusion of Knowledge
Its "Journal." Nos. 11, 12, 13, 14. 1836.
From the Editor.
The India Journal of Medical and Physical Science. Edited by F. Corbyn, Esq. Vol. I. Nos. 1, 2, 3. New Series. Calc., 1836 . 8 vo.

From the Author.
An Essay on the Primitive Universal Standard of Weights and Measures. By Captain T. B. Jervis. Calc., 1835. 12 mo .

From the Author.
Arboretum Britannicum, \&c. By J. C. Loudon, Esq. Nos. 23 to 30, inclusive.

From the Author.
Invasions des Sarrazins en France, \&c. Par M. Reinaud. Paris, 1836. 12 mo .

From the Author.
Lettres sur l' Histoire des Arabes avant l’ Islamisme. Par F. Fresnel. Paris, 1836. 8vo.

> From the Author:

Dissertation Abrégée sur le Ta-tsin, \&c. Par M. de Paravey. Pamph. From Lieut. P. Rainer, R.N.
The original stone brought by his late father from Nubia, bearing the Latin acrostic, a fac simile of which was published in the Transactions of the R. A. S., Vol. III., p. 26 I.

A stuffed specimen of the Puff-Adder, with the poison preserved in the fangs.

Dried specimen of the Saw-fish.
Specimens of the Ornithorhynchus paradoxus, male and female, from New South Wales.

A Nepalese sword.

## From the Author.

Etudes de Géographie Critique sur une partie de l'Afrique, \&c. Paris, 1836. 12 mo .

From the Right Hon. Sir A. Johnston, V.P.R.A.S.
The Renovation of India, \&c. By Dr. Thomas Brown. Edinb., 1820. 16 mo .

From Captain J. Mackenzie, C.M.R.A.S.

Image of Durga, in Jyepoor marble.
Ditto of Vishnu, in ditto.
Ditto of Garura, in ditto.
Ditto of Saraswatí, in ditto.
Two images of the Planets, in Gyah marble.
Model of the Dunya, an instrument for beating out cotton.

A Chunoutce, or brass stand, for holding red earth for marking the forehead, rice for the puja, \&c.

A copper Ghurri, or clepsydra.
The Ghaou mukhi, a kind of glove worn on the right hand by Brahmins and other devotecs at prayer, and in which they count their beads.

A string of Brahminical beads.
:The Ganga-jali, for holding the sacred water.
Specimens of the rakhi; Brahminical bracelets.
Specimens of Kuntis, or necklaces.
The Poita, or Brahminical cord of the Western provinces.
Brass model of the Lota.
A bell used at the puja.
Two specimens of varnished boxes from Benares.
A Hindú Almanack for the year 1835. MS.
Two fans or screens of split straw, from Monghys.
A belna, for rolling out cakes.

> From Colonel Strover, M.R.A.S.

The skin of a Boa-Constrictor, more than thirteen feet in length.
[A Mandarin's dirk.
From Lieutenant Newbold.
A Malayan Sampitan, or Blow Pipe, used by the aborigines of the interior of the Malay Peninsula.

A quiver of poisoned arrows; and two packets of the Upas poison.
From the Author.
Fables de Lokman, adaptées à l' Idiome d’Alger, \&c. 12mo.
Principes de l'Idiome Arabe en usage à Alger. 12 mo .
Vocabulaire Berbère Français, \&c. Par J. H. Delaporte.
From Senhor J. J. da Costa de Macedo, F.M.R.A.S.
Vida de D. Joāo de Castro; por D. Fr. Francisco de S. Luiz. Lisboa 1835 . 4to.

From the Author.
Memoria Estatistica sobre os Dominios Portuguezes na Africa Oriental. Por S. X. Botelho. Lisboa, 1835. 12 mo .

From the Author.
Lehrsaal des Mittelreiches. München, 1836. 4to.
From the Author.
A Criticism on Grimm's and Graff's German Grammars. By Professor Bopp. Berlin, 1836. 8vo.

From the Author.
Die Regenwürmer auf den Feldern der Orientalischen Numismatik, untersueht von. Dr. E. Adernson. Leipsic, 1836. Pampl.

# From the Rev. J. Wilson, Pres. Bombay Branch R.A.S. 

The Oriental Christian Spectator. Various Nos. Bombay, 1836.
From Professor Ritter, F.M.R.A.S.
The following Tracts written by him:-

1. Die Elephant Indiens.
2. Die Opiumcultur und die Mohnpflanze.
3. Das Löwen-und Tiger-Land in Asien, \&c.
4. Der Indische Feigenbaum, \&c.

> From Charles Beke, Esq.

His Defence" of his Origines Biblicæ, against the Critiques of Dr. Paulus. In German. Pamphlet.

From Messrs. Fisher and Son.
Syria, the Holy Land, \&c., illustrated. Parts 5, 6, 7.
The thanks of the Society were ordered to be returned to the respective donors.

The Secretary read a letter from Major-General Sir Henry Worsley, dated the 5 th of July, 1836, in which the General, after adverting to the incidental observations which had of late occasionally appeared in regard to the funds of the Society's being inadequate to the useful purposes contemplated by the Society, begged to tender a Bank Post Bill for One Hundred Pounds, to be appropriated in the way that might be deemed best calculated to promote the utility, and enliance the reputation of the Society.

> Resolved unanimously,

That the special thanks of the Society be returned to Sir Henry Worsley, for his very liberal donation.

Dr. A. Campbell, of the Nepal Residency, and M. Bojer, Esq., of the Isle of France, were elected Corresponding Members of the Society ; ${ }^{5}$ Colonel E. L. Smythe, of the Madras Army, was elected a Resident Member.

A paper ${ }^{1}$ by Lieutenant Reynolds, of the Madras Army, on the T"hags, communicated by Colonel Smythe, was read before the Meeting; and the thanks of the Society were ordered to be returned for the communication.

## DECEMBER 17, 1836.

A General Meeting was held this day: the Right Hon. the Earl of Munster, V.P., in the Chair.

The following donations were presented:-
From the Imperial Society of Natural History of Moscow.
Nouveaux Mémoires de la Société, \&c. Tome IV. Moscow, 1835. 4to. Bulletin de la Société Impériale, \&c. Tome IX. Moscow, 1836, 8vo.

[^115]
## From the Author.

The following Papers read before the Royal Irish Academy :-

1. On an Astronomical Instrument of the ancient Irish; 2. On the Ring-money of the Celtæ; 3. On the affinity of the Phoenician and Celtic Languages: by Sir William Betham.

From the Author.
An Account of the Manners and Customs of the Modern Egyptians. By E. W. Lane, Esq. 2 vols. 8 vo. London, 1836.

From Mahárája Kalí Krishna Bahúdar.
His Map of the World in Hindustani ; two copies.
From the Right Hon. Sir R. J. Wilmot Horton, Bart.
The Ceylon Almanack for 1836. Colombo. 8vo.
From Professor Froehn, F.M.R.A.S.
An Essay on the Writing of the Russians in the Tenth Century. St. Petersburg, 1835. 4to.

An Explanation of an Arabic Inscription in Imeritia. St. Petersburg, 1836. 4to.

A Visit to Mount Athos, \&c.
From the Author.
Ritter"s "Erdkunde von Asien." Vol. IV. Parts 5 and 6. Berlin, 1835.6. 8vo.

> From John Gordon. Esq.

A Political Map of India. 1836.
From the Directors of the Hon. the East India Company.
Two sheets of the large Map of India now publishing under the auspices of the East India Company.

## From Colonel Sykes, M.R.A.S.

His paper on the Quails and Hemipodii of India. (From the Zoological Transactions.)

The thanks of the Society were ordered to be returned to the respective donors.

William Oliver Esq., of the Madras Civil Service, was elected a Resident Member of the Society.

A paper on the Antiquity of the Armenian Language, by Argannon Arratoon, with notes and illustrations by T. M. Dickenson, Esq., was read to the Meeting.

A paper by W. C. Bruce, Esq., of the Bombay Civil Service, on the applicability to India of the Science of Political Economy as received in Europe, was also read.

JANUARY 7, 1837.
A General Meeting was held this day: Sir George T. Staunton, Bart., V. P., in the Cluair.

The following donations were laid upon the table:-
From the British and Foreign Bible Society.
New Testament in Mandchou. 4to.
Gospels in Syro-Chaldaic. 4to.
New Testament in Piedmontese. 8vo.
Ditto in New Zealand. 8vo.
Gospels of Luke and John in French and Vaudois. 8vo.
Gospels in Malayalim. 8vo.
Part of St. Luke, in Berber. 8vo.
Gospel of St. John in Maltese and Italian. 8ro.
Greek Pentateuch. 12 mo .
Rarotonga Testament. 12 mo .
Catalonian Testament. 12 mo .
Latin Bible. 18 mo .
St. John's Gospel in Chippeway and English. 18me.
Malagasse Testament. 18mo.
St. Matthew in Bullom and English, 18mo.
Enghadine Testament. 18mo.
St. Luke’s Gospel in Mexican. 18 mo .
From the Author.
Principles of Murathee Grammar. Calcutta, 1833. 4to.
The Sanhita of the Rig-Veda; with English translation; by the Rev. J. Stevenson. Bombay, 1833. 8vo.

From the Geological Society.
Its "Transactions." Vol. IV. Part 2.

## From the Author.

Specimen of a New Version of the Hebrew Bible. By S. Bennett.
From Captain R. M. Grindlay.
His Pamphlet on the State of the Question as to Steam Communication with India. London, 1837. 8vo.

From the Author.
Litteratur der Sanskrit-Sprache, von F. Adelung. St. Petersburg, 1837. 8vo.

From T. S. Spencer Smith, Esq.
His "Précis d'une Dissertation sur un Monument Arabe du Moyen Age en Normandie." Caen. Pamphlet.

La France Litteraire, \&c. Pamphlet.

From M. J. Desjardins.
Sixième Rapport Annuel sur les Travaux de la Société d'Histoire Naturelle de l'Ile Maurice, 1835. 8vo.

## From the Institute of British Architects.

Its "Transactions." Vol. I. Part 1.
= The thanks of the Society were ordered to be returned to the respective donors.

Ardaseer Cursctjee, Ardaseer Hormarjee, Cursetjee Jamsetjee, and Aga Mahomed Rahém Sherazee, of Bombay; and Chocapah Chetty, of Madras, Esquires, were elccted Non-Resident Mcmbers.

James Henderson, Esq., G. R. Porter, Esq., John Grant Malcolmson, Esq., and John Richards, Esq., were elected Resident Members.

A paper by the late Thomas M. Dickenson, Esq., communicated by the Bombay Branch R. A. S., cntitled, "An Enquiry into the Fate of the Ten Tribes of Israel after the Fall of Samaria, with a view of the History of the Assyrian Empire at that period," was read to the Meeting.

JANUARY 21, 1837.
A General Meeting was held this day; Richard Clarke, Esq., in the Chair.

The following donations were laid upon the table :-
From Professor Lassen, F.M.R.A.S.
Gita Govinda, cum Interpretatione Latina. Christianus Lassen. Bonnæ, 1836. 4to.

> From the Royal Society of Edinburgh.

Its "Transactions." Vol. XIII. Part 2.
Its "Proceedings." Nos. 4 to 9, inclusive.
From Charles P. Cooper, Esq.
Three Pamphlets on subjects connected with the Record Commission.
From Solomon Bennett, Esq.
The following of his Pamphlets:-
Critical Investigations into the Merits of a Lecture, \&c. Two copies.
A Discourse on Sacrifices, \&c. Two copies.
The Molten Sea, \&c.
The Temple of Ezekiel.
A Treatise on the Primogeniture and Integrity of the Holy Language.

The thanks of the Society were ordered to be returned to the respective donors.

A paper by the late T. M. Dickenson, Esq., entitled, "An Enquiry into the Fate of the Ten Tribes of Israel after the Fall of Samaria," was read to the Meeting.

## FEBRUARY 4, 1837.

A General Meeting was held this day; Major Sir Henry Willock, and, afterwards, the Right Hon. Sir Gore Ouseley, Bart., VicePresident, in the Chair.

The following donations were presented:-
From the Asiatic Society of Bengal.
Asiatic Researches. Vol. XX. Part. I.
Journal of the Society. Various Nos.
From the Abbe Dubois, F.M.R.A.S.
Annales de la Propagation de la Foi. No. 50.
From the Geological Society.
Its "Proceedings." No. 47.
From Professor Garcin de Tassy, F.M.R.A.S.
Les Euvres de Wali, Traduction et Notes. Par M. Garcin de Tassy. Paris, 1886. 4to.

Manuel de l'Auditeur du Cours d'Hindoustani. Paris, 1836. 8vo.
From Professor Wcyers.
Catalogus Centuriæ Librorum rarissimorum Manusc. et partim Impressorum, Arabicorum, Persicorum, \&c. \&c. Lugd. Bat., 1836. $4 t 0$.

From M. Guizot, Ministre de l'Instruction Publique.
Voyage dans l'Inde, par M. Victor Jacquemont. Paris, 1835. 4to. Livs. 7, 8, 9, 10.

From Francis Baily, Esq., F.R.S.

His "Supplement to the Account of the Rev. John Flamsteed, the first Astronomer Royal." Lond., 1837. 4 to.

Thanks were ordered to be returned to the respective donors.
A Sketch of the Island of Borneo, by G. W. Earl, Esq., was read to the Meeting; and the thanks of the Society were returned to Mr. Earl for his communication.

The reading of a Paper by the Rev. C. Gutzlaff, on the state of the Art of Medicine amongst the Chinese, was commenced.

## FEBRUARY 18, 1837.

A Geveral Meeting was held this day; the Right Hon. Sir Alexander Johnson, V. P., in the Chair.
The following donations were presented:-
From M. Salvolini.
His "Analyse Grammaticale Raisonnée de differens Textes Anciens Egyptiens." Vol. I. Avec un Volume de Planches. Paris, 1836. 4to.

From the Royal Society of Arts.
Its "Transactions." Vol. LI. Part I.
The thanks of the Society were ordered to be returned to the respective donors.

The reading of the Rer. C. Gutzlaff's paper on the Practice of Medicine by the Chinese was concluded.

A paper by J. R. Sterrart, Esq., on a series of ancient Coins found in India, was read; also a paper on some Inscriptions found on the Coast of Arabia, by Messrs. Hutton and Smith, two officers of the Indian Nary.

Thanks were ordered to be returned to the authors of these communications.

## MARCH 4, 1837.

A General Meeting was held this day; the Right Hon. the President of the Society in the Chair.
The following donations were presented:-
From Henry Thomas Colebrooke, Esq., Director R.A.S. His "Miscellaneous Essays." Lond., 1837. Two vols. 8vo.

From the Author.
Su la Figura e I' Iscrizione Egizia incise in uno Smcraldo Antico, Lettera di Bernardo Quaranta. Napoli, 1836. 4to.

From J. C. Loudon, Esq.
His "Arboretum et Fruticetum Britannicum." Nos. 31 to 35.
From the Rer. Dr. Nott.
A volume of a Chinese work on Medicine, Propitious Days, \&c.
From the Author.
Lithographed portraits of the Persian Princes and their private Secretary. By J. Minasi. Proof.

Syria, \&c., illustrated. Nos. 9, 10, 11.
From the Court of Directors of the Hon. the East India Company.
Johnson's Catalogue of 606 Principal Fixed Stars in the Southern Hemisphere. Lond., 1835. 4to.

From the Royal Astronomical Society.
Its "Memoirs." Vol. IX. Lond. 1836. 4to.
From the Cambridge Philosophical Society.
Its "Transactions." Part 1. Vol. VI.
From Colonel Sykes.
His Paper on a portion of Dukhun, East Indies; from the Transactions of the Geological Society.

> From Baron Hammer Purgstall.

His "Geschichte der Osmanischen Dichtkunst." Vol. II. Pest, 1837. 8vo.

The thanks of the Society were ordered to be returned to the respective donors.

John Romer, Esq., was elected a Resident Member of the Society.
A Paper by Colonel Sykes, on the origin of the Popular Belief in the Upas or Poison Tree of Java; and an account of a Pedestrian Tour, made by Captain James Low, from Tavoy to the Siamese frontier, were read to the Meeting; and the thanks of the Society were ordered to be returned for these communications.

## MARCH 18, 1837.

On the Members assembling this day, the Right Honourable the President announced that in consequence of the decease of the respected Director of the Society, Mr. Henry Thomas Colebroone, to whom the Society owed a debt of exceeding gratitude, not only for its first formation, but for the constant labour and attention which he bestowed upon it from the first year of its existence, the Council had judged proper, as a mark of respect due to the memory of the venerable founder of the Society, and as a token of regret for the loss it had sustained, to adjourn the present Meeting without proceeding to any business whatever.

The Meeting was consequently adjourned to the 1st of April.

APRIL 1, 1837.
A General Meeting was held this day ; the Right Hon. the President of the Society in the Chair.

The following donations were laid upon the table:-
From Sir Graves C. Haughton, Lib. R.A.S.
Four volumes of Documents prepared by the late Alexander Hamilton, Esq., when acting as Private Secretary to Lord Cornwallis during his first administration in Bengal; and which were obtained with a view to the perpetual settlement. They comprise financial statements from the Moghul Conquest to the time when the abstracts were collceted. MS.

## From the Author.

Esquisse Générale de l'Afrique. Paris, 1837. 18 mo .
Notice des Travaux de la Société de Géographie de Paris. Par. M. D'Avezac.

From the Author.
Two pamphlets on the Epidemic Cholera, and the Diseases of Tropical Climates. Lond. 1836. 12 mo .

From John Reeves, Esq.
A Chinese Map of the City of Canton. MS.
From John Romer, Esq.

1. Mirat-i Alum ; Universal History. Persian MS. Folio.
2. Tarikh-i-Negaristan. Persian. Lithog.
3. Kalíla va Dimna; version of Abul Mala Nusr Allab. Persian MS.
4. Kalíla va Dimna; Arabic verse. MS.
5. Marzaban Nameh ; written A. H. 373. MS.
6. Mufarik al Gulub. Persian MS.
7. A Grammar of the Gujuratee Language. By the late W. Forbes Esq. Bombay. Lithog.

> From Major Burt, F.R.S.

His "Miscellaneous Papers on Scientific Subjects, written chiefly in India." London, 1837. 12mo.

## From the Royal Society of London.

Philosophical Transactions, for 1836. Part 2.
Proceedings of the Royal Society. Nos. 26, 27.
Address of the President, \&c. Nov. 1836.
List of the Fellows of the Royal Society.
From the Editor.
Revue du Nord. Feb. 1837. Paris. 12mo.

## From Colonel Sykes.

His Paper on the Increase of Wealth and Expenditure in the various Classes of Society in the United Kingdom; from the Transactions of the Statistical Society of London.

## From M. De Paravey.

Two Pamphlets, by him, on some modern Discoveries, which were known to the ancients; and on Chinese Antiquities. Paris. 8vo.

From Sir Charles Forbes, Bart.
Horsburgh's India Directory; with a short Memoir of the Author London, 1836. 4to.

The thanks of the Society were ordered to be returned to the respective donors.

Captain Thomas Best Jervis was elected a Resident Member of the Society.

A Paper on the Causes which produce the Pattern or Watering in the Damascus Sword-blades, by H. Wilkinson, Esq., was read to the Meeting by that gentleman; and the thanks of the Society were ordered to be returned to him for the same.

## APRIL 15, 1837.

A General Meeting was held this day; the Right Hon. Sir Alexander Johnston, V. P. in the Chair.

The following donations were presented:-

## From the Geological Society.

Its "Proceedings." Vol. II. Nos. 48, 49.

## From the Author.

Remarks on Dr. Buckland's View of the Mosaic Creation, \&c. By Eretzsepher. London, 1837. Pamphlet.

From the Chevalier Kovalevski, Professor of Mongolian Literature in the University of Kasan.
The following of his works, in Russian :-
Mongolian Chrestomathia. Vol. I. Kasan, 1836. 8vo.
A short Mongolian Grammar. 1835. 8vo.
Catalogue of Sanskrit, Mongolian, Tibetan, Mandchou, and Chinese Works in the Imperial University of Kasan.

Abstract of the Ulígerun Dalai, or the Sea of Parables. Kasan, 1834. 8 vo.

From Professor Rosellini, M.R.A.S.
I Monumenti dell Egitto e della Nubia. Plates to the work. Parts $25,26,27,28$. Imperial folio.

From H. H. Spry, Esq., M.D.
The skull of Muchala, a Thag Chief, who was executed at Sauger, Central India, in July, 1833.

The thanks of the Society were ordered to be returned to the respective donors.

Francis C. Brown, Esq., of Anjarakandy, Malabar; and the Rev. C. Gutzlaff, of Canton, were elected Corresponding Members of the Society.
J. G. Malcolmson, Esq., read to the Meeting a Paper, by himseif, on the Saltness of the Red Sea.

A Paper on the first Translation of the Gospels into Arabic, by Baron Hammer Purgstall; and some Remarks on the Buddhist Pricsts of Siam, selected from the MSS. of Captain J. Low, were read to the Meeting.

The thanks of the Society were ordered to be returned to the authors of these communications.

# PROCEEDINGS 

OF

## THE ANNIVERSARY MEETING

of

# THE ROYAL ASIATIC SOCIETY, 

Held on the 6th of May, 1837.

The Fourteenth Anniversary was held this day at One o Clock; the Right
Hon. Charles W. Williams Wynn, M.P., the President of the Society, in the Chair.

The Minutes of the last Meeting were read and confirmed.
The Secretary then read the following Report of the Council :-

## ANNUAL REPORT,

## May 6, 1837.

In submitting the Report of its Proceedings for the past year, the Council has great satisfaction in being able to congratulate the Members on the continued prosperity of the Society.

For some years past the Council has had, on similar occasions to the present, to express its deep regret at the prolonged state of ill-health of the larnented Director of the Society. On this occasion the melancholy duty devolves upon it of recording his demise. It will be in the recollection of the Members, that, but a few weeks ago, this much to be regretted occurrence induced the Council to adjourn the usual General Meeting, and to testify, by every means in its power, the respect of the Society to the memory of Mr. Colebrooke, The Society cannot but feel the deepest concern at the loss of one who originally proposed its formation, and who so ably contributed to support its character and efficiency. In accordance with this feeling, therefore, and as a mark of gratitude due to the memory of our late Director, a proposition will shortly be submitted to you that the Society should, by a roluntary contribution on the part of the Members, obtain a marble bust of the deceased, to be placed in a conspicuous part of the Geiseral Meeting-room of the Society.

It also falls to your Council on this occasion, to mark by a special notice, the loss which this Society has sustained in the deaths of two others of its most eminent Members,-the learned and venerable Sir Charles Wilikins, and William Marsden, Esq., to whom this Society, and Oriental literature in general, are so much indebted. It will not, however, be expected of your Council to enter into, or attempt to discuss, the great merits and worth of these highly distinguished Members of our Society, as memoirs of their lives, if not already, will no doubt soon be before the public, and as characters of so much literary eminence cannot fail to command the attention of the future biographer and historian. It may, however, be allowed here to mention that it was the gracious intention of His Majesty, as signified through the President, to confer the same mark of distinction on Mr. Colebrooke as on Sir Charles Wilkins, but that the extreme ill-health of the former prevented his availing himself of this gracious intention of the illustrious and Royal Patron of the Society.

In addition to the gifted individuals above-mentioned, the Society has sustained a heavy loss in the deaths of the following Members:-Lord Viscount Kingsborough; Lieut.-General Colin Macauley; Major-General William Macleod; Lieut.-Colonel Thomas David Steuart; John Brenton ; John Davidson; Robert Thomas Glynn; David Haliburton; Jerome W. Knapp; James Mill; Alexander Pearson; David Shea; George Smith; John Penford Thomas, Esquires; and, but a very few days ago, in that of another Member,--Sir Whitelaw Ainslie, whose valuable "Materia Indica" has introduced to Europe a knowledge of the various articles used by the natives of the East, in their medicine, arts, and agriculture.

It would be a pleasing duty to your Council to advert to each individual character of the long list of names which has been read, but the limits of this Report admit only of a few brief remarks.

To Lord Kingsborough, the munificent patron of the arts, and generous contributor to all literary and scientific institutions, the Society is indebted for the copy it possesses of the splendid edition of the Antiquities of Mcxico, published by his Lordship; a work which is at once a specimen of graphic skill and elaborate decoration. We are also indebted to Lord Kingsborough for several other valuable donations, among which may be mentioned the original MS. copy of Amiot's Mandchou Dictionary.

Mr. Shea is well known by his tianslation of an interesting portion of Mirkhonds Hisfory of Persia. He had nearly completed a translation of the Dabistan, an account of the rarious religious and philosophical sects that have prevailed in the world, when death put a stop to the further labours of this valuable Member of our Society. He had been induced to undertake this work at the request of the Orieutal Translation Committee; and it will be gratifying to the friends of Mr. Shea to learn, that Captain Troyer, of Paris, a gentleman well-known in this country and throughout Europe for his great acquirements in Oriental literature, has, in the most liberal manner,
undertaken to complete the translation, and to edit the work for the Committee.

Mr. Shea had never been in Asia, and he was one of the few who have acquired a complete knowledge of Oriental tongues, without having visited that quarter of the globe.

Alexander Pearson, Esq., conferred a valuable gift on a large portion of the human race, by introducing the vaccine inoculation into China. This useful, and, with regard to so exclusive a people, difficult measure, he accomplished in the year 1805; and wrote, at the same time, a pamphlet on the subject, which has been much circulated in China.

The "History of British India," has placed the name of James Mile, Esq., in the list of British Historians of the first class; while his works on political economy have secured to him an equal eminence in this branch of science. The great ability displayed by Mr. Mill in his History, and the investigations made by him into the political condition of India, recommended him to the notice of the Court of Directors of the Hon. the East India Company, in whose employ he long held one of the most distinguished situations.

Your Council would now turn to a more pleasing part of its duty. It is happy to congratulate the Members on the increased number of elections since the last Anniversary, which exceeds the usual average of former years; and comprises, in the class of contributing Members, nineteen Resident, and twenty-one Non-Resident. One Honorary, and five Corresponding Members, have also been elected during the same period.

The additional Honorary Member is His Highness the Imám of Muscat. On the arrival in this country of Captain Cogan, of the Indian Nary, in command of the Liverpool man-of-war, a present from the Imám of Muscat to the King of England, the Council took occasion to recommend to the Society to elect His Highness an Honorary Member, in token of its approbation of the encouragement given by His Highness to the Arts and Sciences amongst his people, particularly to those of ship-building and navigation ; and as manifesting its high sense of his desire to open a direct intercourse between his country and Great Britain ; and of the friendly feeling he has on all occasions exhibited towards the subjects, Asiatic as well as European, of the British empire.

Of the Non-Resident Members elccted last year, serenteen are native gentlemen of Bombay, one of Madras, aud one of Bengal. Thirteen of the former are Justices of the Peace at the Presidency to which they belong. To the kindly feelings of Sir Charles Forbes, we are indebted for the introduction to the Society of sixteen of the gentlemen of Bombay; and this accession to our numbers must in every point of riew be a matter of congratulation. Your Council would hope, likewise, as our proceedings become generally and better known among the more enlightened of our
fellow-subjeets in the East, that many others, from all the Presidencies, will be anxious to join the Socicty, and to eo-operate with us in the attainment of its objeets.

The Report of the Auditors on the state of the Finances of the Society will shortly be submitted to you.

While adrerting to the subject of Finance, your Council has much satisfaction in noticing the very handsome donation of 100l. to the funds of the Society from Major-General Sir Henry Worsley ; and likewise to a further proof of his liberality, in having inereased his subscription, which, as an original Member, was only two guineas, to three guineas per annum.

It is with much regret that your Council alludes to the entire failure of the hopes which it has for some ycars past cherished, of obtaining from his Majesty's Government, the aecommodation of the rooms formerly occupied by the Royal Academy in Somerset House, or that of some other publie building. The results of the several deputations to Ministers to urge on them the expediency of such a grant, and the replies to the memorials presented, setting forth the claims of the Society, have been too often brought to your notice to render a recapitulation of then necessary. The first was in the year 1833, during Lord Althorp's administration, when, as is recorded on the minutes of your Council, the deputation was told by his lordship, that it was his lordship's individual opinion, that if the use of the rooms then oceupied by the Royal Academy were to lee granted to any Society, the Royal Asiatic Society should have the preference. The replies to subsequent applications in no way controrerted this ground of hope; but it has within these few weeks come to the knowledge of the Council, that the rooms have been otherwise appropriated.

Your Council would willingly have waired any reference to this subject, did it not feel that its duty to the Society obliges it to make this statement, in order to dissipate from the minds of the Members this long-cherished hope : ant, though it cannot be supposed that any such disappointment will for a moment slacken our endeavours to promote the usefulness of this Society, as regards the welfure of our fellow-subjects in Asia, or as regards the people of this country, in being the medium of communicating to them that knowledge of the former-their Arts, Scienees, Manufactures, and Commeree; of the valuable natural productions and vast resources of our widely-cxtended empire in the East, of which daily experience is now proving the great and increasing worth; still it is necessary to know that we must, in this also, as in all other branches of the objects of this Society, look to our own strength, and to the combination of our private cxertions only.

Your Council is happy to announce that the Committee of Agriculture and Commerce has commenced its operations, and that its first day's proreedings have been printed and eircubated, a few copies of which are now on the tahle. In the choice which the Committec has made of a Chairman, your Council feels assured that it has secured to itself a gruide whose active exertions and great experience will be the best guarantee of its prosperity.

It will not be necessary here to allude to the various topics which have engaged the attention of the Committee of Correspondence since the last Anniversary, as the Right Honorable the Chairman of that Committee will doubtless furnish an ample explanation of them, and of their interest and importance, in his Report.

It is with much satisfaction that the Council adverts to the proceedings of the Committee of the Oriental Translation Fund, and to the munificent support which that institution continues to receive, evincing that the cultivation of an acquaintance with the learning of the East, is looked upon as an important object by the patrons of literature, both in this country and on the Continent.

The following works have been recently published by the Committee:-

## 1. The first volume of the great Bibliographical Dictionary of Haji

 Khalfa; edited and translated into Latin by Professor Flügel.2. The concluding parts of the Trarels of Macarius; translated from the Arabic, by Francis C. Belfour, Esq.
3. The second part of the IHistory of the Afghans; translated from the Persian, by Dr. B. Dorn.
4. The first part of the Arabian Chronicle of Tabari ; a work of much authority in matters relating to the early history of the Mohammedans; translated into French by M. Dubeux.
5. The second and concluding volume of the Harivansa ; a mythological work of the Hindus; translated into French from the Sanskrit, by M. Langlois.
6. The second and concluding volume of the Chronicles of Rabbi Joseph ; translated from the Hebrew by Dr. Bialloblotzky.
7. The History of the Temple of Jerusalem; translated from the Arabic by the Rev. James Reynolds.
8. The poem of Lailí and Majnún; translated from the Persian of Nizámi, by James Atkinson, Esq.

Several valuable works are now in the course of printing under the auspices of the Committee; while the translation of many others is in a state of considerable forwardness. Among the former may be mentioned the following :-

1. The Vishnu Purana, one of the Puranas of the Vaishnava order, containing copious details relating to the doctrines and rites of the votaries of Vishnu ; with a genealogy of Hindu Kings, and the Life of Krishna; translated from the Sanskrit, by Professor Wilson.
2. The text of the Sankhya Karika; a compendious view of the Sanklya system of Philosophy; with Colebrooke's translation, accompanied by notes, illustrations, \&c., by Professor Wilson.
3. Makrizi's History of Egypt, commencing with the fall of Saladin; translated into French by M. Quatremere.
4. The first book of the Rigreda Sanhita, a collection of ancient Sanskrit Hymns; edited and translated into Latin by Professor Rosen.

The numerous donations to the Library and Museum since the last Anniversary have been already notified in the proceedings of the Society. It will, therefore, be necessary to particularize only one or two of those, which, by their importance or rarity, call for especial remark.

The additional Sanskrit MSS. and printed Tibetan books, presented by Mr. B. H. Hodgson since the last Annirersary, complete a body of original Bauddhic literature, certainly unique in Europe. The yet obscure system of philosophy by which so many millions of inhabitants of the East are directed, and which may, perhaps, boast of a greater number of followers than any other existing system in the world, may now be illustrated from the original sources, and its principles accurately developed. Testimonies of the importance of these works have been given by continental anthors. The philologist also will be gratified by the large accession of materials derived from the number of Tibetan texts now placed at his disposal.

To J. C. Whish, Esq., the Library is indebted for a large collection of works, chiefly in Sanskrit, but in the Malayalma character, written on palmleares, and principally comprising the Védas, and other religious and philosophical works of the Hindus. This large collection was made by his late brother, C. M. Whish, Esq., of the Marras Civil Service, during a course of many years that he was resident on the Western coast of the Southern Peninsula of India.

John Romer, Esq., is the donor of several eurious Manuseripts, some of which are of great rarity; we may specify a poetical version in Arabic of the Kalila va Dimna, and the Marzaban Nameh in Persian, purporting to be written in A.D. 983.

The two numbers of the Society's Journal which have been published since the last Anniversary, are now on the table. A reference to their contents will evince the interest taken by men of eminence in literature in all matters relating to the East.

Among the Papers in these Journals, we may notice the Sketch of the Kingdom of Pandya, by Professor Wilson; and notices of some ancient Hindu Coins in the Museum of the Society, by the same gentleman.

Ram Raz's Paper on the proposed introduction of Trial by Jury into India, is a gratifying proof of the satisfaction given to the natives by the ameliorations gradually introduced amongst them by our gorernments; and an evidence of the sound vicws entertained by them on their social and political rights.

The Council would also refer to the Papers by Mr. Gutzlaff, on the the subjects of Chinese literature and science; and would remark that, from the growing intercourse with that remote country, all additional information
respecting its inhabitants, and their modes of thinking and acting, are desiderata of the first importance.

The Council trusts that the zeal manifested by absent Members for the literary success of the Society will be an incentive to those resident in this country, to devote some portion of their leisure to communicate to it the stores of information which many of them have at their disposal.

Your Council will now conclude its Report, trusting that the foregoing, though brief, review of its proceedings during the past year, will be considered satisfactory, and evince the interest it has taken in the superintendence and guidance of the affairs of the Society.

The following Report on the Financial State of the Suciety was read by Richard Clarke, Esq.:-

## REPORT OF THE AUDITORS,

 for 1837.The Auditors have the honour to lay before the Meeting an abstract of the accounts for the year 1836, and an estimate of the probable receipts and disbursements, for 1837. They have carefully examined the accounts and vouchers from which the abstract is prepared, and have found them satisfactory and correct in every respect.

The amount received by the Treasurer in the course of the year (Vide Statement, No. I., p. $x \times v i$, ) is $1418 l$. 9s. 3d., and the balance brought on from the preceding year was 402l. 6s. $1 d$., making together a total of 1820l. 15 s . 4 d . It must be observed, however, that of this total, a portion, to the amount of $85 l$. 1 s ., consists of payments made by the Members of the Committee of Agriculture and Commerce, which form no part of the funds appropriable to the general objects of this Society. The Treasurer has kindly undertaken to transfer this item to a new head of account, which he will open for the money of the newly-formed Committee. If the last-mentioned sum be deducted from the total shown in the abstract, the real amount of receipts will be 1735l. 14 s. $4 d$.

The total expenditure is shown to be 1310l. 11 s .8 d., and the balance in favour of the Society 510 l .3 s .8 d. ; but deducting the 8.5 l . 1 s . from the receipts, as before explained, the real balance in favour of the Society will be 425l. 2s. $8 d$.

In stating this balance, the Auditors feel it to be their duty to observe that of the amount received, and expended, no less a portion than 477l. 15s. consists of compositions paid by Members in lieu of annual subscriptions. That sum, in fact, represents ten years' subscriptions of twenty-two Members, which have been expended in one year. The Auditors find that the practice of carrying the compositions paid in any year to the account of the disposab'e income of that year, has long prevailed. It appears to them, however, to be incorrect, as exhibiting a fallacious view of the Society's finances; and dangerous, inasmuch as the withdrawing of so many annual contributions, if the amount of the compositions be not distributed over a series of
years, may, at no distant period, produce embarrassment in fulfilling the engagements which the Society must, every year, be prepared to meet.

The estimates for 1837 (Vide Statement, No. II., p. xxvii,) state the probable receipts at $1244 l .7 s$., to which is added the balance of cash in the Treasurer's hands, $510 l .3 s .8 d$., making a total of $1754 l .10 \mathrm{~s} .8 \mathrm{~d}$. The Auditors observe that $200 l$. are included in this estimate as the amount of compositions that may be anticipated in the course of the year; this sum they conceive, on the grounds they have before stated, ought not to stand, to its full amount, among the available assets. The admission fees and subscriptions of new Members are taken at $100 l$. and the arrears likely to be received at $90 l$.

It appears from a statement drawn up by the Secretary, and now laid on the table, that the total number of Resident and Non-resident Members is 434 , of whom 181 have compounded for their subscriptions.

The sum receivable annually from the remaining Members is $677 l$. $5 s$. ; but it appears from the statement that the subscriptions of fifty of the 434 are in arrear, or in abeyance.

The portion of the estimates which can be considered as certain or fixed, consists of annual subscriptions, the annual donation of the East India Company, the payment from the Oriental Translation Fund, and the dividend on stock, and amounts, in all, to $809 l .9 \mathrm{~s}$; the remainder is contingent.

The estimated expenses of the current year, arc stated at 1883l. 19s. 9 d . Of this amount, $48 \mathrm{ll} .16 s .9 \mathrm{~d}$. are on account of the printing of four numbers of the Society's Journal in 183.) and 1836 ; it having been customary to discharge the printing-bill of one year out of the income of the following. There is also another charge of $80 l$. for a work in lithography now in progress. But it being most desirable, with a view to the best possible administration of the Society's Funds, that the whole of the outlay of the year should be defrayed within the twelremonth, there have been included in this estimate $200 l$. as the probable expense of printing two Numbers of the Journal, being all that it is intended to issue in the present year 1837.

In addition to the foregoing estimate of what may be considered the ordinary or current expenditure of the year, the Auditors regret to observe that provision must be made to meet two very lieary drafts on the Society's Treasury; one for the discharge of a bill of 40 cl .5 s . due to the late Printers, and the other for necessary repairs to the house, estimated at $180 l .17 \mathrm{~s}$, making together a sum little short of $600 l$.

In contrast with these extraordinary claims, the Auditors have to observe, that $300 l$. are owing to the Society by the Oriental Translation Fund; and that about $400 l$. are due on account of admission fees and subscriptions by Members of the Society. The Auditors earnestly recommend that every proper exertion be made, to get in as much as possible of these large outstanding sums, and that before the close of the present year, all the debts of the Society be paid off, and that, for that purpose, a sale of so much stock be effected as may be necessary to discharge the balance.

The Auditors would further beg leave to recommend that, in future, the cstimates be prepared in two parts; -the first part exhibiting the fixed and ascertained income, against which should be charged the certain and
unavoidable expenses of the year. The second part should exhibit all contingent and uncertain receipts, against which should be charged, first the supply of any deficiency in the fixed receipts as compared with the certain expenditure. The remainder of the contingent estimate would be the sum appropriable, at the discretion of the controlling authorities, to every purpose which can further the important oljects for which this Institution is established.

The Auditors have to observe, that, in consequence of the lamented death of Mr. Colebrooke, the original number of three Trustees has been reduced to one; the first Trustees being Mr. Colebrooke, Dr. Noehden, and the Treasurer, Mr. James Alexander.

It only remains for the Auditors to perform the gratifying duty of bearing their testimony to the unceasing and kind attention which the Treasurer, Mr. Alexander, continues to pay to the concerns of the Society; and to express the satisfaction they have derived from the accuracy and clearness of the accounts kept by the Secretary, Captain Harkness.
(Signed) R. Clarke $\left\{\begin{array}{c}\text { Auditor on the part } \\ \text { of the Council. }\end{array}\right.$
C. Elliott $\{$ Auditors on the part S. Dyer $\quad$ of the Society.

Royal Asiatic Societys House, Grafton Street, Bond Street, 6 th of May, 1837.
STATEMENT, No. I.

STATEMENT, No. II.


Colonel Briggs moved that the thanks of the Society be given to the Auditors for their services ; and that their Report, together with that of the Council, be received, and printed in the Proceedings of the Society : seconderl by Major Moore, and carried unanimously.

The Right Hon. Sir Alexander Johnston, as Chairman of the Committee of Correspondence, detailed the operations of that Committee, since the last Anniversary, to the following effect :-A rariety of reasons have called the attention of the British public, at the present moment, to three great divisions of Asia. The first, that which is bounded on the West by the Mediterranean and the Red Sea; on the East by the Euphrates and the Persian Gulf; on the North by the mountains of Armenia; and on the South by the Arabian Sea. The second, that which extends from the Himalayan Mountains, North, to l'oint de Galle, South; and from Surat, West, to Assans, and the Chinese prorince of Yunnan, East. The third, that which includes the whole of China in the North, and Borneo, Celebes, New Guinea, and the other Eastern Islands, as fur as Torres' Straits, and the N.W. part of Australia, in the South.

As the Comnittee of Correspondence always direct their researches to those parts of Asia to which the circumstances of the time have particularly called the attention of the public, they have directed their inquiries during the last year, to sulbjects intimately connected with those three divisions of Asia; and I shall take the liberty to explain to the Meeting the nature, as well of those circumstances, as of the inquiries made by the Committee, and the reasons I hare for believing, from the present feelings of the pcople of Asia in farour of useful knowledge and literary distinction, that the proceedings of the Society are popular, and will be encouraged throughout that great and interesting portion of the globe.

As to the first division of Asia, there are two circumstances which have particularly called the attention of the public to it. First, the general conviction which prevails of the necessity and practicability of establishing a direct and expeditious communication between Great Britain and British India, either through the Arabian or the Persian Gulf. Second, the general belief which prevails, that the Russian Government may, in consequence of the extension of its frontiers towards the sources of the Euphrates and Tigris, attempt, in the event of a future war between England and Russia, to aim a blow at the British possessions in India through the Persian Gulf. With a view to these two circumstances, the Committee have endeavoured to acquire a thorough knowledge of the geography and topography of that division of Asia; and have derived so much information from the Surreys of the Indian Nayy, as to render it their duty, considering the debt of gratitude which the friends of science owe to this distinguished body of men. to allude shortly to the history of their military achievements; their maritime surveys; and diplomatic negociations.

The inhabitants of the Western coast of the peninsula of India, from Cape Comorin, South, to Surat, North, have always, from the earliest times, owing to a variety of causes, had a great propensity to piracy. In consequence of this, the Great Mogul, as long as he exerciserl any authority orer
that coast, kept up a navy, under the command of an Admiral called the Sedee, for the protection of the trade which was carried on ly his subjects between India and the Persian and Arabian Gulfs. The British Government, when Bombay was ceded to Great Britain by Portugal, found it necessary to establish and keep up a navy for a similar purpose ; and it expended $50,000 l$. a year upon this navy from 1710 to 1756 . In the latter year the Government had, upon an occasion of great political importance to the Britisl interests in India, a full opportunity of estimating the value of the services which might be derived from this navy, it having become necessary, in consequence of the innumerable depredations committed by the pirates, and the great extent of coast which they had acquired, to annihilate the power of the celebrated pirate Angrea, who had got complete possession of all the seacoast, 120 miles in extent, from Tamana to Bancoot, and all the inland country, as far as the mountains, which in some places are thirty, in others twenty miles from the sea-coast. The ships and men of that navy having been employed upon that occasion, under the command of one of their own officers, Commodore James, were completely successful; destroyed the whole of Angreas fleet; and, with the assistance of some land troops, took his celebrated fort of Severn-droog, and all his other forts; and put an end to his authority and depredations. ${ }^{1}$ From that time to the present period, they, as well in the capture of the island of Ternate, in the Burmese war, in the expeditions against the pirates of the Persian Gulf, as in a great many other military expeditions upon which they have been employed, have shown the greatest promptitude, the strictest discipline, and the most undaunted courage. They have been equally distinguished lyy the zeal, and by the great practical and theoretical science, with which they have executed those maritime surveys by which they have been enabled, during the last forty years, to complete the most useful and valuable charts of different parts of the coasts of Asia, and of the coasts of the Arabian and Persian Gulfs. ${ }^{2}$ During the latter part of the last century, many of the officers gained great credit by the different maritime surveys to which their names are respectively affixed. In the beginning of the present century, Captains Ross and M'Gowan, made a trigonometrical survey of the seas between the Straits of Malacca and the Yellow Sea. In 1819, in consequence of the benefit which had been previously derived, during the expedition against the pirates in the Persian Gulf, from the accuracy with which they had examined the different inlets and creeks in that sea, some of the officers were employed by the Bombay Government, in making the chart of the whole of the Persian Gulf, which was completed in 1828. In that year, in consequence of the destre which was evinced by the public, of having a communication between Great Britain and British India through the Arabian Gulf, Captain Elwon was employed, in the Benares, in surveying that Gulf, from the Strait of Babel-
${ }^{1}$ The building on Shooter's Hill, called Severn-droog, was erected by Commodore James, in honour of that event.

2 The collection of 118 charts, published by order of the East India Company, chiefly from surveys performed by the officers of the Indian Navy, show the value of the services cxecuted by this able body of men.
mandeb to Judda, and Captain Moresby, in the Palinurus, in surveying it from Judda to Akkaba and Suez: and the result of these two survers has been published in that magnificent chart of the whole of the Arabian Gulf, of which Captain Cogan has presented a copy to the Society. In 1833, some more of the officers were ordered to survey the coast of A rabia, from the Arabian to the Persian Gulf; and thereby connect the survey of the Eastern coast of Africa, made from the Cape of Good Hope to the Arabian Gulf, by Captain Owen, of the Royal Nays, with that of the Western coast of the peninsula of India, made from Cape Comorin to the Persian Gulf, by the officers of the Bombay Marine, and between eight and nine hundred miles of the coast of Arabia have already been surveyed by them. In the same year Lieutenant Wellsted was employed in surveying the Island of Socotra, and his chart, and his account of that island, copies of which are published in the Journal of the Geographical Society, do the highest honour to his talents and to his scientific acquirements, and afford the public a proof of the adrantage which they have derived from the employment of such an officer on so important a service. Many of the officers of this navy have arailed themselves of the opportunities which their profession has afforded them, of acquiring a knowledge of the customs and iuterests of the different native chiefs on whose coasts they have been employed. Captain Cogan has particularly distinguished himself by his knowledge of the territories and of the interests of the Imám of Muscat; and by establishing an intimate alliance between that chief and Great Britain. He, at the request of the Imám, two years ago, brought to England the Liverpool, of 74 guns, as a present from the Imám to the King of Great Britain; and, by command of His Majesty, last October, took back one of the finest of the Royal yachts as a present from His Majesty to the Imám. This officer, while he was in England, having given the Committee much useful information relative to the countries and people under the authority of the Imám of Muscat, and to the protection and encouragement afforded by the Imám to arts and sciences, the Society, on the recommendation of the Committee, nominated that chief one of its Honorary Members, and sent him, by Captain Cogan, a diploma conferring that honour upon him. The Government of Great Britain, aware of the impurtance of the Bombay Marine, have lately extended to that navy the provisions of the Mutiny Act; have given the officers a fixed rank; have placed the whole establishment under the superintendence of one of his Majesty's naval officers at Bombay; and have changed the name of the service from that of the Bombay Marine to that of the Indian Nary. Under all these circumstances, I can have no dount that the Society must be, as the Committee of Correspondence is, convinced that the Indian Navy is, at the present moment, not only one of the most important departments of the military and civil services in British India, but also one of the most powerful engines which can be employed by the Society for procuring information relative to A sia, and for diffusing amongst the people of that division of the globe, the arts, the sciences, and the civilization of Europe.

As to the second division of Asia, the following is the circumstance which
has principally called the attention of the public to it. The consideration, first, of the effect which the approximation of Great Britain to the British possessions in India, by opening a direct communication between Great Britain and India, through the Arabian and Persian Gulfs, is calculated to produce, as well upon the minds and feelings of the people of Great Britain with respect to India, as upon the minds and feelings of the people of India with respect to Great Britain. Secondly, of the effect which the establishment and colonization of a great body of Englishmen in India is calculated to produce upon the moral and political feelings of the people of India. Third, of the effect which raising the people of India to the moral and political situation of the people of Great Britain is calculated to produce, upon the authority of Great Britain in India. And, fourthly, of the effect which the measures which must, sooner or later, be adopted by the British legislature for rendering Great Britain independent of foreign countries for cotton and silk, by getting those articles from British India, are calculated to produce upon the interests of Great Britain and India. With a view to this circumstance, the Committee of Correspondence have taken steps for obtaining accurate information, from genuine Hindu sources, relative to the general history, laws, moral principles, arts and sciences of the Hindus of India; for establishing Literary Societies amongst the Hindus, for completing, through them, with the assistance of the local governments, such parts of the Mackenzie Collection as are still incomplete; ${ }^{3}$ for procuring from the East India Records ${ }^{4}$ in this country all such Reports as can throw light upon the ancient laws, usages, and customs, which, at the time each province was annexed to Great Britain, prevailed amongst the Hindus of that province; for ascertaining the genuine opinions ${ }^{5}$ of the Hindus upon all ques-
${ }^{3}$ Lord Aucklaud has, receutly, it is understood, in consequence of the suggestions offered to him by the Committee before his departure from this country, taken the subject into his consideration, and appointed Mr. Taylor, who has lately published some of the papers relative to Madura collected by the late Colonel Mackenzie, to assist the Hindú Literary Society at Madras, in arranging such of the papers of the Mackenzie collection as are now at Madras.
${ }^{4}$ Sir Alexander Johuston has, at different times, read most of these Reports, and is, therefore, fully aware of the very valuable information which they contain relative to the laws, customs, and usages of the Hindús. A few of them are printed in the four volumes of the Judicial and Revenue Selections, but many are still in manuscript, and are highly deserving of being published, as they do the greatest honour to the taleuts and zeal of those public servants by whom they are drawn up.
${ }^{3}$ These opinions may be collected from the translations which have been made from Sanskrit into Euglish of several Sanskrit works by the late Sir Charles Wilkins, the late Mr. Colebrooke, and Professor Wilson. It is advisable to make such a collection at the present moment, when the Society can have the assistance of its present Director, Professor Wilson, who is allowed to be one of the most distinguished, if not the most distinguished, Sanskrit scholar of the present day; and when it is anxious, in consequence of the recent death of those two distinguished Oricntal scholars, Sir Charles Wilkins and Mr. Colebrooke, to show cvery respect to their memory, and to enable the British public to appreciate the real value of their acquirements, and their literary labours.
tions of religion, morals, metaphysics, laws and government; for procuring returns of the statistics ${ }^{6}$ of British India from the Bengal, Madras, and Bombay Governments; for arranging such returns according to the plan adopted by the French Government in 1802 ; for procuring all the observations which have been made, either in favour or against the continuance of the permanent system as to lands in India; ${ }^{7}$ for collecting information from every part of India relative to the growth of cotton, and the propagation of the silk-worm, for the first of which articles Great Britain is at present dependent upon the United States, and for the second of which, upon France and Italy, instead of deriving both, as it is bclieved she may do, from British India, and thereby circulating amongst her own subjects, in her own territories, that portion of her capital which she now circulates for those articles amongst foreigners in foreign countries; for enabling the people of Great Britain to become acquainted with the process ${ }^{8}$ obscrved by the people of India in the manufacture of steel, on which subject a rery able paper was lately, on the suggestion of the Committee, read before the Society by Mr. Wilkinson; for promoting the establishment of a Committee of Agriculture, ${ }^{9}$
${ }^{6}$ The Committee have already obtained much valuable information upou the statistics of British India from the Bengal and Madras Governments; aud are daily expecting to receive more from the Bombay Governmeut, in answer to the queries which werc drawn up by Mr. M ${ }^{6}$ Culloch, at the request of Sir Alexander Johnston, and sent out by him to the Governors of those Presidencies.
${ }^{7}$ It is of great importance to those Europeans who may wish to acquire lands in British India, to be acquainted with the nature of the different tenures upon which lands are held in that country, particularly with the nature of the permanent settlement, about which so much difference of opinion has prevailed for many years.
${ }^{8}$ As it is extremely uscful for the mauufacturers of Great Britaiu to have a detailed account published of the different processes observed by the natives of every part of Asia in their different manufactories, Sir Alexander Johnstou is endeavouring to procure such accounts from every part of India : Mr. Lord lately sent him some particulars relative to the cutting and polishing of agate, cornelians, \&c., which was published in the third Volume of the Society's Journal ; and Mr. Wilkinson lately prepared for him the paper which is above alluded to, upon the manufacture of steel. It appears, by some papers collected by Sir Alexander Johnston, that his uncle, the late Hon. Colonel George Napier, when in the Ordnance, inquired very particularly into the manufacture of gunpowder in different parts of Asia; and ascertained that the proportions of charcoal, sulphur, and saltpetre, used in China, from the most ancient periods, in the manufacture of gunpowder, are the same as are used in this country, to produce the strougest and best gunpowder.
${ }^{9}$ With a view of acquiring a knowledge of the agriculture and statistics of British India, the Committee of Correspondence, on the suggestion of Mr. Holt Mackenzie and Dr. Royle, some time ago recommended to the Council the formation of an Agricultural Committee, composed of the Members of this Society. Sir A. Johnston having himself at the same time communicated with the Members for Glasgow and Liverpool, and with some of the leading men of Manchester, upon the subject, and having found from them that they all agreed as to the utility of such a Committee; and one having been recently formed, it is only necessary to state that the Chairman of that Committee is Sir Charles Forbes, and that the two
composed of Members of the Society; and for reviving at Madura, subject to such alterations as change of circumstances and the progress in arts, science, and literature may require, the ancient Hindu College, ${ }^{10}$ which is supposed to have had so great an intluence upon the education and character of the Hindus in the Southern peninsula of India, from the third to the tenth century of the Christian era.

As to the third division of Asia, the following are the circumstances which have principally called the attention of the public to it. The first, that of the frontiers of the British possessions in India having been recently extended, partly by conquest, partly by acquisitions obtained by treaties, to the neighbourhood of the province of Yunnan, the Eastern province of China. The second, that of the discovery which has recently been made, that the tea-plant is growing in a tract of country extending 300 miles within the British territories. The third, that of British traders having been enabled, in consequence of the opening of the trade with China to all British subjects, to visit parts of that Empire which were never visited before by British subjects, and to become better acquainted than they formerly were with the produce of the different islands in the Eastern Archipelago, and with the various wants of their inhabitants. With a view to these circumstances, the Committee have taken measures for procuring all the valuable information which is preserved in the Archives of the Jesuits ${ }^{11}$ at Naples, Rome,
leading Members of the Committee are Mr. Holt Mackenzie and Dr. Royle, in order to convince the public of its efficiency, and of the advantages which Great Britain and India are likely to derive from its establishment.
${ }^{10}$ In consequence of the influence which was exercised by this College for seven centuries over the Hindus in the Southern Peninsula of India, the celebrated Jesuit Missionary, Robertus di Nobilibus, who resided at Madura in the 17th century, and the equally celebrated Jesuit Missionary Beschi, who resided at Trichinopoly in the 18th century, both formed plans for reviving it; but, owing to the dissensions in their order, were unable to carry them into effect. The father of Sir Alexander Johnston, and the late Colonel Mackenzie, who resided at Madura in 1783, having procured an account of the ancient College, and copies of the plans of Robertus di Nobilibus and Beschi, in that year formed a plan of their own for the revival of this College ; and Colonel Mackenzie, who was an officer of the Engineers, and who was then superintending the building of the house for Mr. Johnston, which is known at Madura by the name of Johnston House, and which is now the property of Sir Alexander Jolnston, at the request of Mr. Johnston, laid out this house in such a manner as to enable Mr. Johnston, whenever an opportunity might offer, to convert it into the Hindu College which he had planned. No such opportunity, however, occurred during the lives of Colonel Mackenzie and Mr. Johnston; but as the house is still the property of Sir Alexander Johnston, he has offered to make over all right which he has to it, according to the original plan of his father, to any individual or society who may agree to carry that plan into effect ; and he is now in communication with a Society abroad, who have the intention of sending out to Madura six men eminently distinguished in different branches of science, for the purpose of establishing themselves at Madura, and educating the Hindus of that part of India, and circulating amongst them the arts and sciences of Europe.
${ }^{11}$ Sangermano, in his "Description of the Burmese Empire," translated by Dr. Tandy, and published by the Oriental Translation Fund, shows the value and the

Genoa, Venice, Paris, Madrid, and Lisbon, respecting Upper and Lower Assam, Munipore, Borg, the North-East parts of the Burmese Empire, Laos, Cambodia, Cochin-China, and all the Eastern provinces of China; for calling the attention of the British public to the moral, political, and commercial importance of the Anglo-Chinese College, ${ }^{12}$ established at Malacca by the late Dr. Morrison, and so liberally supported by Sir George Staunton; for encouraging the Rev. Mr. Gutzlaff ${ }^{13}$ to proceed in his very interesting inquiries relative to the history, literature and science of China, to the practice of medicine in that country, and to the different idioms which are spoken by the people of Japan ${ }^{14}$ who inhabit the coasts of that Empire; for acquiring a knowledge of the Island of Quelport, ${ }^{15}$ which, from its local situ-
extent of the information which the Jesuit Missionaries acquired of each of the countries in Asia in which they resided. The Annales des Propaganda also show that the Catholic Missionaries who are at present in different parts of Asia, are not less active than their predecessors were in obtaining useful information relative to that part of the world.
${ }^{12}$ In No. 1050 of the Literary Gazette, there is a very interesting account of a young Chinese gentleman who was educated at that College, and who is believed to have had considerable influence, by the knowledge he obtained at that College, in altering the opinions of the Chinese Government with respect to the trade of their country with foreign nations.
${ }^{13}$ This enlightened and zcalous Protestant missionary is indefatigable in his endeavours to acquire a thorough knowledge of China and its inhabitants, as appears from his analysis of the Yih-She, published in the third, and his paper on the Practice of Medicine by the Chinese, published in the fourth Volume of the Society's Journal; and to circulate amongst them a knowledge of the history, literature, arts and sciences of Great Britain, as appears by his translation into Chinese of an abridgment of the History of England; and his Geographical and Astronomical tracts printed in that language, at Canton, with portraits, maps, and diagrams. Sir Alcxander Jolnston, having submitted his paper on the Practice of Medicinc by the Chinese to Sir Henry Halford, who, notwithstanding his extensive practice, devotes much of his attention to inquiries in every part of the world, connected with the knowledge of his profession, has forwarded from him to the Rev. Mr. Gutzlaff, a set of queries, which are calculated to elicit from the Chinese medical men, such further information as may be interesting to the medical men of this country.
${ }^{14}$ He has recently sent to Sir Alexander Johnston, a vocabulary of the idioms of the language spoken by the Japanese who inhabit the coasts of Japan, which he compiled from the information he received from four Japan mariners, who, after having been wrecked in the Chinese Seas, were brought to Macao, and resided with him at that place for some time.
${ }^{15}$ It is believed that the Government of the United States are fully aware of the commercial importance of the local situation of this island. The plan which they, and the Government of France have adopted, of sending their ships of war on frequent cruises through the Eastern Archipelago and the Chinese Seas for the purpose of making the inhabitants of these seas aware of their maritime power, and for that of acquiring local information respecting all the islands in those seas, and all the coasts of China bordering on them, has enabled those two governments, particularly the former, to acquire such a knowledge of these seas as may be of the greatest importance to them in a political and commercial point of view.
ation, is of as much importance to those who wish to carry on a trade with Japan and Corea, as the Island of Singapore is to those who wish to carry on a trade with Siam and Cochin-China, on the one side, and all the islands of the Eastern Archipelago on the other; for having translations ${ }^{16}$ made from the Dutch into English of all the papers in the Dutch records of Ceylon, Cochin, Negapatnam, and Malacca, which throw any light upon the history of the islands in the Eastern Archipelago, and upon the trade which was, and is still, carried on between the Dutch settlements and those islands; and for obtaining from Mr. Earl, ${ }^{17}$ a gentleman whose observations as to these islands, and the policy which the British Government ought to observe with respect to their inhabitants, are of so much value, the information which he collected during the recent voyages which he made to Borneo, and many of the islands in the Eastern Archipelago.

The following circumstances show that various descriptions of persons in Egypt, Arabia, India, Malacca, and China, are anxious to acquire literary fame themselves; to respect those who have distinguished themselves by their scientific discoveries; to promote the improvement of the condition of their fcllow-creatures, and to co-operate with the Society in the attainment of the objects which they have in view.

In Egypt, the Pasha ${ }^{18}$ of that country, who is an Honorary Member of this Society, by the attention with which he receives any Members of the Society who may visit his country; in Arabia, the Arabs who inhabit both banks of the Euphrates, ${ }^{19}$ by their conduct towards Colonel Chesney, and the expedition under his command ; the inhabitants of Bagdad, by the reception which they gave the steam-boat, the Euphrates, when it came up the Tigris to that place; and the Imám of Muscat, by the policy which he has pursued in sending the Liverpool, one of his 74 -gun ships, as a present to
${ }^{16}$ Sir Alexander Johnston, while President of His Majesty's Council in Ceylon, had most of these documents, and most of the Dutch works upon the same subject, translated from the Dutch into the English lauguage for his own information; and he is at present collecting them in order that he may present them to the Society.
${ }_{17}$ This gentleman, some time ago, wrote, at the request of Sir Alexander Johnston, the papers relative to Borneo which have been published in the Society's Journal ; and it is to be hoped that he will be employed in some situation in which he will have an opportunity of carrying on, with facility, those researches respecting the islands in the Eastern Archipelago, and the utility of establishing an English Colony on the Northern part of Australasia, for which he is so peculiarly well calculated, by his acquirements, his character, and his zeal.
${ }^{18}$ Captain Mackenzie, a very intelligent corresponding member of the Society, who recently came through Egypt from Calcutta to England, had an interview while at Alexandria with the Pasha, and was received by him with the greatest attention.
${ }^{19}$ It is understood that the inhabitants of Bombay have determined to erect a monument at Alla, the place near that part of the Euphrates where the steam boat, the Tigris, was overset, to the memory of the officers and men who were lost on that occasion; and that the inhabitants of Alla, so far from being averse to this measure, are ready to assist in erecting the monument.
the King of England, by Captain Cogan, an officer of the Indian Nayy, evince the feelings which they respectively entertain in favour of the improvement of the condition of their countrymen. At Bombay, the resolution which the nephew of that distinguished scholar, the late Mulla Firoz, has adopted, to publish, by subscription, with the aid of the Society, a translation into English of his uncle's work, called the George Nameh, on the discovery of India by Europeans; the application which Manockjee Cursetjee, and sixtcen of the most distinguished Parsis, thirteen of whom are Justices of the Peace, made some time ago, through their friend, Sir Charles Forbes, to be elected Members of this Society, show the value which the natives of the the highest respectability at Bombay attach at present to literary distinction, and the honour of becoming Members of this Society. ${ }^{\text {.0 }}$ At Calcutta, the improved system of education which has been introduced amongst the natives; the number of useful works on science and literature which have been translated from the English into different Oriental languages; the variety of newspapers, in English and in the native languages, ${ }^{21}$ which
${ }^{\text {83 }}$ The circumstances which led to the first extension by Act of Parliament to tho natives of British India of the right of sitting upon Juries, and of being appointed Justices of the Peace, have made the natives of the highest distinction at Bombay anxious to have the honour of holding this responsible office. Sir Alexander Johnston, in 1810, when Prcsident of His Majesty's Council in Ceylon, conceiving that the surest way of improving the education, and raising the character and the situation of the natives of India, was by giving them an ample share in the government of their country, obtained for the natives of Ceylon a charter, under the great seal of England, imparting to them trial by jury, the right of being appointed Justices of the Peace, and all the other most important rights of British-born subjects. Mr. Wynn, in 1826, then President of the Board of Control, thinking, from the moral and political effect which had been produced on the people of Ceylon by this measure, that it would be advisable to adopt a similar measure with respect to the natives of British India, introduced the Act by which the right of sitting upon Juries was extended to the natives of Bombay, Madras, and Calcutta; and Lord Glenelg, Mr. Wynn's successor, subsequently, upon the petition of the natives of Bombay, also extended to the natives of those three places the right of being appointed Justices of the Peace. This right is highly valued, as none but those natives who are the most distinguished by their character and their talents are appointed to the situation.
${ }^{21}$ The following is a list of Indian Newspapers and Periodicals, made out in the year 1836 :-

Calcutta. When Published.

are circulated through the country; and the frequent public meetings, and public discussions, which take place upon subjects of great public interest, have gradually weakened the prejudices which prevail amongst the natives against coming to Europe ; and must ultimately induce them to follow

## Calcutta-(Continued.)



Madras.
Madras Male Asylum Herald . . . . . Twice a Week.
Madras Gazette . . . . . . Ditto.
Madras Times • • . . . . . Ditto.
Standard . . . . . . . Ditto.
Conservative . . . . . . Ditto.
Madras Journal of Literature and Science . . Monthly.
Madras Almanack . . . . . . Yearly.
Madras Army List . . . . . Ditto.

Bombay.

the examples set them by the celebrated Brahmin the late Rammohun Roy, ${ }^{28}$ and the Mahommedan Prince Jamh-ud-din, ${ }^{23}$ of visiting England themselves, of becoming acquainted, upon the spot, with the nature and effects of all its political institutions, acquiring the means of exercising a direct influence upon the government of British India, and thereby protecting the rights and privileges, and promoting the local interests of themselves and their countrymen. At Madras, the natives, by forming a Hindú Literary Society at that place, show the desire they feel to acquire knowledge, and to promote the researches of this Society, by inquiring into the history, religion, laws, architecture, and agriculture of their country. At Malacea, the Chinese, who have been educated at the College at that place, afford a decisive proof of the benefit which the people of China must derive from a good education, and of the influence which such an education must give them orer the opinions and feelings of their countrymen, and over the moral and political changes, which, owing to the progress of knowledge, must sooner or later take place in that country. At Canton the establishment of the Ophthalmic Hospital ; at Macao that of the Morrison Education Society; at both of these places the exertions of Dr. Colledge and other professional gentlemen, to afford medical and surgical relief to the Chinese; and the various European and American institutions at Canton and Macao, must gradually produce amongst the Chinese people a conviction of the practical benefits to be derived from European science and
${ }_{22}$ Rammohun Roy, when in England, was examined by the Committee appointed by the House of Commons to take evidence rclative to India, before the passing of the last Act which was made for the government of that country, and thereby had a public opportunity given him of stating his opimions as to the privileges and rights which ought to be granted to his countrymen, and as to the alterations which ought to be made in the British government of India. This circumstance alonc, shows the very great protection, and the very great advantage, which must be derived by the natives of India, from haring countrymen of their own, of high character and great talents, residing in this country.
${ }^{23}$ This prince, after visiting different parts of England, Scotland, and Ircland, and obtaining a knowledge of the agriculture, manufactures, and statistics of the country, has become a proprictor of East India Stock, and thereby acquired a right of exercising his influence by his vote, over the British government of India. The history of this prince's family, shows the great 'changes which have taken place in India within the last fifty years. Hyder Alí, the grandfather of the prince, was once so powerful a chief, that in the years $\mathbf{1 7 8 1}$ and $\mathbf{1 7 8 2}$ some of his troops were so near Madras, as to render it unsafe to reside in any of the garden-houses near Fort St. George, and Lord Macartney, the then Governor, and his private Secretary, the present Sir George Staunton's father, derived great credit from being able to get him to conclude, in 1783, that treaty, in allusion to which, the portrait of Lord Macartney, and Sir George's father, now in the present Sir George Stauntons possession, was painted. Scarcely twenty ycars afterwards, the British army succeeded in annihilating altogether, under his son Tipoo, Hyder's dynasty, and Prince Jamh-ud-dín, the son of Tipoo, and a pensioner of the British Governmeut, is now in England, and qualified to cxercise, as a Proprietor of East India Stock, a greater influence over the British government in India, than his grandfather, in the plenitude of his power, had ever exercised.

European acquirements. The liberal and enlightened conduct of the foreign merchants at Canton and Macao, as well of those who are subjects of the United States, as of those who are subjects of all the different sovereigns of Europe, in unanimously resolving to subscribe a large sum of money, for erecting a monument in honour of the memory of the late Captain Horsburgh, shows the estimation in which they hold scientific acquirements. The resolutions which were passed by them on the occasion, whether we consider the person to whose memory they relate; the persons by whose co-operation they were passed; the place at which they were passed; the nature of the monument, and the situation in which it is to be placed, must afford the highest encouragement to scientific pursuits, by lolding out the highest honours to those who succeed in them. The person to whom the honour is paid, is one who left his lome in Fifeshire as a cabin-boy, who, having been employed as a sea-faring man in the Indian scas, was wrecked between Batavia and Ceylon, on the Island of Diego-Garcia; and was, in consequence of this misfortune, first led to make those valuable observations, and to collect those valuable materials, from which, with the assistance of Sir Charles Forbes, and his other friends, he afterwards published that magnificent collection of charts, which is known by the name of the Indian Pilot. The persons by whose unanimous co-operation the resolutions are passed, are merchants of almost all the nations of Europe, America and Asia. The place at which they were passed, is Canton, which, though 18,000 miles from the spot where he died, is a place at which all the foreign merchants are the most capable of appreciating the value of his labours, from having become fully aware, during their voyage from their own country to that place, of the perils from which they had been saved by the accuracy of his charts and his observations. The monument which is to be erected is the most appropriate one that could have been erected to his memory, as it is to consist of a series of light-houses, which are calculated to afford to navigators the same protection by night, which his charts and observations afford them by day. The situation in which these light-houses are to be erected, is at one of the great entrances through which ships pass from the Pacific into the Chinese seas; and is calculated, both from the number of ships which are likely to pass through that entrance, and from the great moral and political changes which are likely to be brought about amongst the inhabitants of the empire of China, and amongst those of all the Eastern islands, by the European establishments in Australasia, to secure for Horsburgh's memory, for many ages yet to come, the respect and gratitude of the inhabitants of every maritime nation of Europe, Asia, and America.

Sir Ralph Rice said, that in rising to propose a vote of thanks to the Right Hon. Chairman of the Committec of Correspondence, for his very able Report, he only regretted that the pleasing office had not been entrusted to a person more able to do justice to it. He felt convinced, that, after the very eloquent and comprehensive address which had just bcen delivered, there would not be found one dissentient voice. It was, indeed, delightful, to find a gentleman, after having retired from the duties of a laborious pro-
fession, devoting his valuable leisure to subjects intimately connected with the general history of India, and affording, by such an employment of his time, so much information and gratification to those with whom he came in contact. When it was recollected what a vast range of information the Right Hon. Gentleman had displayed for so many years in his annual addresses, the extraordinary skill which he had shown in the arrangement of his interesting facts, as well as the valuable suggestions which he had made for the benefit of the Society, it appeared a matter of doubt whether more praise was due to him for what had been done, the actum, or for what was afterwards to be undertaken, the agendum. He would not detain the Meeting by entering into any remarks on the subjects which had been just now touched on in so masterly a manner, but would simply propose"That the thanks of the Society are due, and hereby given, to the Right Hon. Sir Alexander Johnston, the Chairman of the Committee of Correspondence, for his Report, and that he be requested to reduce his observations to writing, in order that they may be printed in the Society's Journal."

General Boardman seconded the motion, which was carried unanimously.

Sir A. Johnston expressed his satisfaction at receiving a vote of thanks for his services, from persons so well calculated to decide on their utility.

Colonel Galloway moved a vote of thanks to the Council for their services during the past year. He regretted that he was but little able to do justice to the resolution, but whoever looked at the ability and zeal requisite to effect the objects which had this day been brought before the Meeting, must admit that the Council not only deserved the thanks of the Society, but of all mankind.

Major Chase seconded the motion, which was carried unanimously.
The Right Hon. the President then rose, and said that they had now come to that point in their proceedings, where he usually made such observations as occurred to him on the general state of the Society, and the proceedings of the past year. He must be permitted to express first, the lively satisfaction which he felt in witnessing so numerous an attendance of members. When he saw that sufficiency of seats could scarcely be found for the gentlemen who were anxious to witness the proceedings of the Anniversary Meeting, he could not but suppose that the Society was exciting an increased intercst. It had been truly remarked, that the Society had been instituted on broad and extensive principles, analogous to those commercial principles which the liberality and extended views of modern times had generated and sanctioned. Formerly it was declared, that we must consider that trade the best, where the greatest quantity of commodities was exported from this country, and the least imported. We then considered our interests as promoted by the depression of commercial rivals. Juster principles had since been adopted and acted upon. We are
now sensible, from experience, that no part of the world can improve or become prosperous, without extending an increase of wealth and prosperity to Great Britain. That none can suffer commercial reverses which shall not also be felt by our merchants and manufacturers. This principle particularly applied to our intercourse with India. Superior skill and superior science had enabled our manufactures to supersede those of India, not only in the markets of Europe, but in those of India herself; but the demand for them must be crippled and limited, if we did not find articles which we could advantageously import from India in return. If, then, we looked only to the local and limited interests of this island, we should best consult them by promoting the industry, the welfare, and manufactures of India. But he would be sorry to suppose, in looking at this great country, that she could be induced to act on such narrow and exclusive views, and not regard the happiness and prosperity of eighty millions of her distant subjects to be of far more value than any temporary advantages which might accrue to herself from any system she might deem fit to pursue. In her connexion with India, the Mother Country had every desire to act on a system of reciprocal advantage, and was most anxious, that, in return for what she received, she might contribute to ameliorate the state of civilization in that country. The Asiatic Society had the same object in view, and for that purpose had directed its attention to several subjects relating to India. First to the literature of the East, which had been particularly committed to the care of the Oriental Translation Committee, which had taken its origin from the Asiatic Society. The labours of that branch had been of vast importance, and more had been effected in the last ten years through its instrumentality, than had been altogether performed in any antecedent period. A second object of the Society's attention was the History of India. It would be perceived from the Society's Journal and Transactions how much had been effected in that department. Thirdly, the arts, manufactures, and produce of India, as well as the degree of improvement they were capable of. For the purpose of this investigation, the Committee of Agriculture and Commerce had lately been appointed, and from the commencement they had already made, from the experience, the zeal, and qualifications of the Chairman (Sir Charles Forbes), as well as of the other members whom they had selected, he trusted that results the most satisfactory might be anticipated. These were the principal objects of the Society with a view to ameliorate the condition of the inhabitants of India; and he felt pride in saying that their labours were productive of much good. When he had the honour of addressing the Meeting last year, he had mentioned the great uneasiness which had been expressed at the suspension of the printing of Oriental works at Calcutta at the expense of Government. The expense which was incurred was trifling, when compared with the magnitude of the objects which were held in view. The Society had taken some pains to demonstrate the impolicy of this suspension, and had effected so much, that permission was granted that the works in progress should be completed, and should go before the public in a perfect form. Whether the printing should continue to be altogether suspended, rested with the

Governor-General of India, as the authorities at home would wait for his answer before they decided. This suspension of Oriental studies in India was of great importancc. Without cultivating the native tongues, we could not arrive at an accurate and useful knowledge of the manners, habits and customs of the people. The Government were most anxious to urge the introduction of the English language, as well as our inproved civilization, amongst the natives. But experience had proved that this could be best effected by paying respect to thicir languages and national feelings. He trusted that the encouragement given to the study of the Oriental tongues, might not be withdrawn, but that the enlightened policy of former times might be continued. The expediency of this course was deeply felt by Sir C. Wilkins, who was the first among Europeans that successfully studied the Sanskrit language, and whose translations of the Bhagavat Gita and Hitopadesa were the first fruits of his success, and to whom the world is indebted for originating the translation of the Laws of Menu, a work afterwards completed by Sir W. Jones. It was to be hoped that the Government would see the impolicy of stopping the printing of those works, which, in the opinion of sound judges, served to draw closer the ties which connected the two countrics. The Right Hon. the Chairman of the Committee of Correspondence, in his admirable address, had expressel some fears as to the hostile intentions of Russia. No doubt, many persons in that country as well as others, entertained ambitious views; but when he considered the intimate union which had existed between that country and England for more than one hundred years with little interruption, he was convinced in his own mind that a greater security for continued peace was afforded by the strong mutual commercial interests which so closely connected them, than by any political alliance which could be formed. When the aberration of the Emperor Paul had for a short period interrupted the harmony whicls existed between thie two countries, notwithstanding every opposition, the usual commerce did in fact go on, until the catastrophe took place which violently finished the Autocrat's reign, and put an end to the disunion between Russia and this country. Such were the general remarks he deemed it right to make on the objects of the Society. With respect to particular points for consideration, the statc of the finances called loudly for increased exertion.

The Members should endeavour to procure new subscribers. Unless more than usual efforts were made, the necessary repairs of the house would cause them to encroach upon the fund of the Society, which was laid by for particular purposes. He would dircct the attention of all the Members to this important subject, in order to stimulate them to exertion. Since last year, the Society had to deplore the loss of Mr. Colebrooke, who had always been so zealous a promoter of its interests. That distinguished gentleman had occupied the chair of the Society at its first sitting. He had recommended him (Mr. Williams Wynn) to fill the office of President of the Society. This should not be deemed a compliment to an individual, but as a mode of showing that a connexion existed between the Society and the Government, and to prove to those who were in India, that the

Government were anxious to countenance and assist any means for producing good to the inhabitants. His Royal Master, George the Fourth, approved of the suggestion, and had graciously declared himself the Patron of the Society, at the same time directing that the First Commissioner for the affairs of India should officially hold the office of Vice-Patron, and thereby supply a constant channel of communication between the Society and the Government. His present Majesty had also accepted the office of VicePatron when Duke of Clarence, and since his accession had not only succeeded his Royal Brother as Patron, but had distinguished the Society by a mark of his particular favour, as selecting the late Sir Charles Wilkins and Sir Graves Haughton as companions of the Guelphic Order. As the situation which Mr. Colebrooke had occupied as Director, was to be filled up, it became necessary to procure a successor. An application was made to Sir Graves Haughton, who occupied a distinguished place in Oriental literature, to fill the vacant chair. Ill-health prevented that gentleman from complying; and it was perhaps a matter of congratulation to lim, as his private friend, that he had not consented. Zeal for the interests of the Society might have produced extraordinary exertion, which might prove too much for a weakly state of health; and the Society would then have to deplore the loss of another eminent individual. Application was next made to Mr. Professor Wilson, who stood conspicuous as the first Sanskrit scholar of the day, and was distinguished by holding the situation of Professor of Sanskrit at the University of Oxford. It was felt, in recommending this gentleman to the Council, that not only was he the most eligible person, from the services which might naturally be expected from him; but that a lustre would be added to the Society in every country in Europe and in the East, by possessing so distinguished a scholar amongst their Members.

The advanced hour of the day prevented his adverting to other matters of interest, yet he could not forbear lamenting the death of Mr. Marsden, whose works on Eastern subjects had been the means of greatly extending the knowledge of Eastern philology and history. In conclusion, he must again express his pleasure at the fulness of the attendance, and would recommend to the good offices of all present, the task of procuring a further addition to their numbers, as the funds of the Society stood in great need of assistance.

Sir Alexander Johnston rose to discharge the pleasing duty of proposing a vote of thanks to the President. The longer they had the pleasure of knowing him, the more reason had they for being proud of their connexion with him. If anything more than another merited their gratitude, it was the handsome manner in which he had at first joined the Society. It was then important that a person connected with the Government should countenance and support the Society. The Right Hon. Gentleman came forward at the moment when the Society required it ; he was then at the head of the Board of Control, and he did not for a moment hesitate to join them. Since that period, through all its vicissitudes, he had been regularly elected to the chair, which he adorned as much by his liber-
ality of feeling, as by his zeal for literature and science. It was unnecessary to say more than to propose that the thanks of the Socicty be given to the Right Honourable President.

The Right Hon. Henry Ellis seconded the motion; which was carried unâ voce.

The President returned thanks.
Thomas Weeding, Esq., moved a rote of thanks to the Vice-Presidents.

Sir Charles Forbes seconded the motion; which was carried unanimously.

Sir A. Johnston returned thanks for himself and colleagues.
Sir Grorge Staunton rose to propose a vote of thanks to the Treasurer, for the zeal and attention which he always paid to the interests of the Society. As he was standing, he should take the opportunity of adverting to a subject whicl deserved, he thought, the attention of the Society. It was to effect a more intimate union between the Royal Asiatic Society and the Oriental Translation Fund. In their anxiety to improve the state of their finances, it might be worth while to see if a considerable saving could not be efferted by such a junction. The two Societies had the same object in view, and held their meetings in the same housc ; and yet their measures were carried on by a double machinery. The expense, of course, was greater, by such separate proccedings, and this le thought might be considerably diminished by a connexion between the two Societies. He did not mean at that time to move any Resolutions on the subject; but he would read two Propositions which he had prepared as subjects to be considered on a future occasion:-

1. That a more intimate union of interests and of government, between the Royal Asiatic Society and the Committee of the Oriental Translation Fund is highly desirable for the promotion of their common object, the diffusion of knowlerge comnected with Asia, whether by means of Translations, or by means of Origiual Communications.
2. That the following propositions be made to the Committee of the Oriental Translation Fund :-

That the Oriental Translation Committee be a Committee of the Royal Asiatic Society : that all the present Members of thc Committee be confirmed : but that no new Members be elected who are not Members of the Royal Asiatic Society.

That the Oriental Translation Fund be in future called the Oriental Translation and Publication Fund, and be applicable, in certain proportions, to the purposes of original publications upon Oriental subjects, as well as to those of translations of Oriental works; and that all Ten Guinea Subscribers to that Oriental Fund shall be entitled, accordingly, to receive copies of all the Publications of the Royal

Asiatic Society, in addition to those of the Translations published under the direction of the Oriental Translation Committee.

It is presumed that the plan of including the original publications of the Society with the translations of Oriental works, if approved of by the present Subscribers, will add to the popularity of the Fund, and that the augmentation in the list of Subscribers would prevent any diminution of the pecuniary resources specially at the disposal of the Oriental Committee, while it would materially improve the general finances of the Society.

He thought it would not be difficult to show the advantages which must arise from the proposed junction. When first the Oriental Translation Fund had commenced its labours, it had printed many valuable works, which had been but little known. The first harvest of their exertions was now reaped, as the works which remained to be translated could scarcely be expected to possess so much interest as those which had been first selected. He suggested therefore, that original contributions should be mixed with the translations which were made, as the works sent out by the Oriental Translation Fund would thus become more popular, and more widely disseminated. The same persons who were anxious to see translations of Eastern works, would be glad also to peruse original contributions referring to India; so that the present patrons and supporters of the Oriental Translation Fund could not be expected to make any objection. He laid the proposition before the Meeting, under the impression that some new arrangement of this description was now become necessary, and would be found to improve the finances of the Society. To return to the first object of his rising, he begged to move a vote of thanks to the Treasurer, for his valuable services.

Louis Hayes Petit, Esq., seconded the motion; which was carried unanimously.
J. Alexander, Esq., returned thanks for the flattering compliment which had been just paid him. He only wished that his exertions were more beneficial to the Society. He begged leave to urge on the Meeting the necessity of exertion, in order to increase their funds, without which they could not hope to be independent, and really useful.

Colonel Vans Agnew moved a vote of thanks to Captain"Harkness, the Secretary of the Society, for his services. The high attainments and zeal of this gentleman, were too well known to require any encomium from him. He hoped that they might long have the advantage of his services, and that his example might stimulate other military men from India to employ their leisure agreeably, and usefully, in cultivating Oriental literature.

George Arbuthnot, Esq., seconded the motion; which was carried unanimously.

Captain Harkness returned thanks.

Sir Henry Willock said, that in rising to propose a vote of thanks to Sir Graves Haughton, the Librarian, he had to announce to the Meeting that the weak state of that gentleman's health had obliged him to retire from the duties of his office. A distinguished officer, however, had consented to undertake the labours of the office, and he felt confident that the Meeting would congratulate themselves when he named Colonel Francklin.

Colonel Strover seconded the motion; which was carried unanimously
The Meeting then proceeded to ballot for the Officers and Council for the ensuing year; Andrew Macklew, Esq., and W. Newnham, Esq., were appointed Scrutineers. Professor Horace Hayman Wilson, was elected Director of the Society ; and Colonel W. Francklin, Librarian; the other Officers were re-elected. The following gentlemen were elected into the Council, in the place of the eight who had retired :-the Hon. Mountstuart Elphinstone; the Right Hon. Henry Ellis; Sir Graves Haughton; Colonel John Briggs ; John Francis Davis, Esq.; Charles Elliot, Esq. William Newnham, Esq.; and William Oliver, Esq.

## PROCEEDINGS

OF

## THE GENERAL MEETINGS

of

## THE ROYAL ASIATIC SOCIETY.

## JUNE 3, 1837.

A General Meeting was held this day ; the Right Hon. Sir Alexander Johnston, Vice-President, in the Chair.

The Minutes of the Anniversary Meeting were read and confirmed.
The following donations were laid upon the table :-
From the Authrr.
First Impressions and Studies from Nature in Hindustan. By Lieut. Bacon. 2 vols. 8vo. London, 1837.!

## From the Author.

Rise and Progress of the British Power in India. By Peter Auber, Esq., M.R.A.S., \&c. Vol. I. 8vo. London, 1837.

## From Major Sir Henry Willock.

A series of sixty Bronze Medals of Russian Monarchs, illustrative of the History of Russia; in a case.

Précis de l'Histoire de Russie, depuis Rurik jusqu'a la mort de l'Impératrice Catherine II. 12 mo . St. Petersburgh, 1814.

From the Author.
Voyages and Adventures in the Indian Archipelago, in 1832, 33, 34. By G. W. Earl, Esq., M.R.A.S. 8vo. London, 1837.

From the Author.
A Dissertation on the Soil and Agriculture of the British Settlement of Penang, \&c. By Captain James Low, C.M.R.A.S. 8vo. Singapore, 1836.

## From the Royal Irish Academy.

Its "Transactions." Vol. XVII.
Its "Proceedings." No. 1, 2, 3. 1836-7.
From the Statistical Society of London
Its "Transactions." Vol. I. Part I.!
From the Author.
Resumé des principaux Traités Chinois sur la Culture, des Muriers, et l'Education des Vers à Soie." Par M. Julien, F.M.R.A.S., \&c. 8vo. Paris, 1837.

## From the Author.

Das Sprachgeschlecht der Titanen. Von J. Ritter von Xylander. 12 mo. Frankf., 1837.

From M. Alexandre de Humboldt, F.M.R.A.S.
W. von Humbolt on the Kawi Language of Java. In German. Vol. I. 4to. Berlin, 1836.

## From the Editor.

Mary, Queen of Scots; an Historical Play, by the late Dr. Francklin. Edited by his son, Lieutenant-Colonel W. Francklin, M.R.A.S. 12 mo. London, 1837.

A case, containing miniature portraits of the kings of Dehli ; also one containing drawings of Buddha Gaya.

## From the Royal Geographical Society.

Its "Journal." Vol. VII. Part 1.

## From the Asiatic Society of Bengal.

Tytler's Translation into Arabic of Hooper’s Anatomists' Vade Mecum. 4to. Calcutta, 1836.

The Susruta; or Hindu System of Medicine. Sanscrit. Vol. II. svo. Calcutta, 1836.

The Naishadha Charita. Part 1. 8vo. Calcutta, 1836. Sanscrit.
Asiatic Researches. Vol. XIX. Part 1. 4to. Calcutta, 1836.
From Sir Grenville Temple, Bart.
Esquisse de la Restauration de la Ville de Carthage. One sheet.
Prospectus of the "Société pour l' Exploration et les Fouilles du Sol de l'Ancienne Carthage, près de Tunis."

From the Author.
Institutiones Linguæ Pracriticæ. Concinnavit C. Lassen. Bounæ, 1837. 12mo. Parts 1 . and 2.

From the Author.
On the Origin of the Egyptian Language. By Dr. J. Loewe.-(From the Asiatic Journal.)

## From the Geographical Society of Paris.

Bulletin de la Société, \&c. Deuxième Série. Tome VI. 12mo. Paris, 1836.

From J. C. Loudon, Esq.
His "Arboretum et Fruticetum Britannicum." Nos. 37, 38, 39, 40.
His "Suburban Gardener and Villa Companion." No. 1.
From John Romer, Esq., M.R.A.S.
Baillie's Arabic Tables. 4to. Calcutta, 1801.
From Baron Mac Guckin de Slane.
His Edition and Translation of "Le Diwan d'Amrolkaïs. 4to. Paris, 1837.

The thanks of the Society were ordered to be returned to the respective donors.

The Secretary read the following letter from Major-General Sir Henry Worsley, K.C.B.

"Shide Hill, Newport, Isle of' Wight, May 25, 1837.

" Dear Sir,
" Daily reminded by declining health, that
'Man wants but little here below,
Nor wants that little long,'-
it occurs to me that I cannot more suitably appropriate some of the bounty which I derive from the best and most interesting military service in the world, than by contributing a portion of it to promote the utility and stability of the Royal Asiatic Society ; for which purpose I have the honour to place at the disposal of the Council the enclosed $1,000 \ell$., to be applied, either collectively to the general concerns of the Society at large, or a moiety, more or less, to be assigned for furthering the objects of the Committee of Agriculture and Conmerce, as the Council, in its discretion, may please to determine.
" I am, \&c. \&c.,
(Signed) "H. Worsley."

> " To Captain Harkness,
> Secretary of the R. A. S., \&c.

Resolved,
That the special thanks of the Society be conveyed to Sir Henry Worsley, for his munificent donation.

Moved by Sir George Staunton, seconded by Sir Charles Forbes, and

Resolved unanimously,
That a subscription by the Members of the Society be opened for the purpose of defraying the expense of a bust of Sir Henry Worsley, to be vol. Iv.
placed in the Meeting-Room, in honour of so distinguished a benefactor of the Society.

Resolved,
That the subscription of each Member be limited to the sum of One Guinea.

The renerable Archdeacon Robinson, and William Lavie, Esq., were elected Resident Members of the Society.

Captain James Mackenzie, of the Bengal Native Cavalry, read to the Society a portion of his notes taken during a passage from Calcutta to Alexandria, in 1835, and 1836.

Thanks were returned to Captain Mackenzie for bis communication.

## JUNE 17, 1837.

A general Meeting was held this day: Professor Horace Hayman Wilson, the Director of the Society, in the Chair.
The following donations were laid upon the table;-
From the Author.
Modern India; with Illustrations of the Resources and Capabilities of Hindustan. By H. H. Spry, M.D., M.R.A.S., \&c. 2 vols. 12 mo . Lundon, 1837.

From the Right Hon. Sir R. J. Wilmot Horton, Bart.
The Ceylon Almanac, and Compendium of Useful Information, for the year 1837. Colombo. 8 ro.

## From the Editor.

Revue du Nord ; April, 1837.
From the Rev. Dr. Wilson.
The Oriental Cbristian Spectator. Vol. VII. Nos. 5 to 15 inclusire. Bombay, 1836.

From Messrs. Fisher and Sons
Syria, the Huly Land, \&c., illustrated. Part 13.
From Colonel Miles, M.R.A.S.
A Map of Bháratak hand. MS.
A drawing of the Seven Khands, and the Sapt Samudras; or the seven divisions of the world, and the seven seas.

A drawing descriptive of the Seven Heavens of the Jainas.
The abore were presented to Colonel Miles, by a Juin priest, of the province of Marwar.

## From Professor C. Ritter, F.M.R.A.S.

His pamphlet on the Topes of India.
The thanks of the Society were ordered to be returned to the respective donors.

Henry Wilkinson, Esq., was elected a Resident Member of the Society.
David Blane, Esq., of the Bombay Civil Service, was elected a nonResident Member.

Colonel Sykes read a paper on the Three-faced Busts of Siva, in the Cave Temples of Elephanta and Ellora: and the thanks of the Meeting were returned to him for the same.

## JULY 1, 1837.

A general Meeting was held this day: the Right Hon. the President of the Society in the Chair.

The following donations were laid upon the table:

## From the Right Hon. Lord Teignmouth.

Notes on Indian Affairs; by the Hon. Frederick Joln Shore. 2 vols. 8vo. London, 1837.

From the Société de Géographie de Paris.
Recueil de Voyages et de Mémoires, \&c. Tome Cinquième. 4to. Paris, 1836. (Géographie d'Edrisi).

## From the Zoological Society.

Its " Proceedings." 3 Nos.
The thanks of the Society were ordered to be returned to the respective donor's.

Colonel Samuel Goodfellow; Edward R. Power, Esq.; John Ramsay, Esq., M.D.; and Kirkman Finlay, Esq., were elected Resident Members.

George Ashburner, Esq., and Lieutenant William Joseph Eastwick, were elected non-Resident Members.
M. D’Avezac, of Paris ; and Sir Thomas Read, K.C.B., were elected Corresponding Members of the Society.

Professor Wilson, the Director of the Society, read a Paper by John Romer, Esq., to which the Professor had appended some remarks, on the subject of the authenticity of the Zend and Pehlevi languages, as they appear in the religious writings of the Parsis.

Selections from a translation by Dr. Wilson, President of the Bombay Branch, R.A.S., of the general Sirozé of the Parsis, was also read to the Meeting by Professor Wilson.

The thanks of the Society were ordered to be communicated to Dr. Wilson, and Mr Romer, for their communications.

$$
\text { JULY } 15,1837 .
$$

A general Meeting was held this day: Professor Wilson in the Chair. The following donations were laid upon the table:From the Author.

Narrative of a Voyage of Observation among the Colonies of Western Africa, \&c. By Captain James E. Alexander, M.R.A. S., \&c. 2 vols. 8 vo. London, 1837.

From the American Philosophical Society.
Its "Transactions ;" Vol, V. Part 3.
From the Author.
Arboretum et Fruticetum Britannicum. By J. C. Loudon. Nos. 41, 42. From J. R. Morrison, Esq.
The Chinese Repository. Vol. V. Nos. 7, 8, 9.
From the Chevalier Bianchi, F.M.R.A.S.
Dictionnaire Ture-Français. Tome second. Par J. D. Kieffer et T. X. Bianchi. Paris, 1837. 8ro.

> From Professor Rosellimi, C.M.R.A.S.

I Monumenti dell Egitto e della Nubia. Tomo III. Parte Seconda. 8vo. Pisa, 1836 ; also Plates to the work, Disp. 29, 30, 31, 32 . Imp. fol.

> From John Murray, Esq.

The Life of Robert, Lord Clive. By Major-General Sir John Malcolm, G.C.B. 3 vols. 8 ro. London, 1836.

The thanks of the Society were ordered to be returned to the respective donors.

The Secretary read the following letter, addressed to the Right Hon. the President, by the Right Hon. Sir John Cam Hobhouse, Bart., M.P., Vice-Patron of the Society :-
"India Board, 11th of July, 1837.
"Sir,
"I have the honour to inform you that Her Majesty has been graciously pleased to signify to me her consent to become Patron of the Royal Asiatic Society of Great Britain and Ireland.

$$
\begin{array}{cc} 
& \text { "I remain, Sir, \&c., } \\
\text { (Signed,) } & " J \text { Јон Новноиse." }
\end{array}
$$

"To the Right Honourable
"C. W. Williams Wynn, M.P."
An extract from a letter addressed to Sir Charles Forbes, Bart., by the thirteen Parsí gentlemen of Bombay who were elected Non-Resident Members of the Society in July, 1836, was read, expressing their high sense of the honour conferred on them, by their election into the Society, and their desire to further its objects in every way in their power.

Philip Melvill, Esq., and John Henry Brady, Esq., were elected Resident Members of the Society.

A portion of a Biographical Memoir of the late H. T. Colebrooke, Esq., written by his son, Edward Colebrooke, Esq., was read to the Meeting, by Professor Wilson.

The thanks of the Society were ordered to be returned to Mr. Colebrooke for his communication.

The Chairman announced that the Meetings of the Society were adjourned till December.

## LIST OF THE MEMBERS

OF

# THE ROYAL ASIATIC SOCIETY 

OF

GREAT BRITAIN AND IRELAND.

CORRECTED TO THE 31st OF JULY, M. DCCC.XXXVII.

## 

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## Vita=觔atrons:

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[^0]:    ${ }^{1}$ This Saka, or, as it is commonly called, Saliváhana Saka, or Era of Saliváhana, commencel A. D. ${ }^{7} 9$.
    ${ }^{2}$ Guru, a family pricst, or one of a particular sect or order.-EDit.

[^1]:    ${ }^{1}$ Copper Sasana. Deducing his gencalogy from Pulakesi, it eontinues:-"In trinsutar paneha satéshu, Saka varsha (or 530), on the cighth day of the sixtcenth royal vietorious year (Yijaya raj Samvatsara), on oecasion of a solar eclipsc, the King Vikramaditya and his Queen having bestowed certain gifts, the ehief Senipati, or general, son of the Saeliva, or minister, at the same time being in presence of the King, washed the feet of Rava Sarmana, son of Madhuva Sarmana, and bestowed on him the village of Kurt-Kotal2, \&c." The grant was found in digging the foundations of the Kulkurui's (or village rceord keeper's) house, of this placc. The titles of the priests, Sarmana, are remarkable, as indieating sectaries of the Buddha faith.
    ${ }^{\varepsilon}$ Ins, at p. 1 of the MS. ${ }^{5}$ Ibid.
    ${ }^{4}$ Ibid. The geuealogy is given thus: "Yijayaditya, son of Vinayaditya, son of Vikramaditya, Satya Sri." The date is, ekia paneha shatu utra shatashateshu, Vijaya raj Samratsara chatur trimshetu. The Rajah, having taken iustruction from his Guru (Swagaria) Niravidya Pundit Yatipati, the disciple of Udaya Deva Pundit, \&c., the "destroyer of other erecds," (para matha,) gave one-eighth of the village to the Jinendra of the Shenlih vasti of Pulikara Nagara. Pulikara Nagara is the ancient name of Lakmeswar.
    ${ }^{5}$ Ins. p. 7. It records a grant of $\mathbf{1 0 0}$ Gariyotis (an obsolete measure of land), to the Jina Deva of Ramacharya, in the Shenkh vasti, a white Jinaluja of Pulikara Nagara. The date is, pancha shat utra shatashiteshu saka varsheshu vetitéshu Vijaya raja Sanıratsara pravartamana dwitya.

[^2]:    ${ }^{1}$ Ann. of Rajasthan, i. 97, 8.

[^3]:    ${ }^{1}$ Ins. at Tengli, No. 54 of VII., p. 263. "He reigned twenty-four years from Srimukh Samvatsara." Sce also at Rudwadi, No. 56, p. 268.
    ${ }^{2}$ App. No. I. $\quad{ }^{3}$ Ins. at Gadaj, No. 40 of VII., p. 235.
    ${ }^{4}$ Ins. at Mangoli, No. 4 of IX., p. 471. ${ }^{5}$ Ins. at Anigiri, No. 7 of IX., p. 562.

[^4]:    ${ }^{1}$ Ins. at Nagari, Nos. 27 and 35 of V., pp. 93 and $107 . \quad{ }^{2}$ Ibid.
    ${ }^{3}$ Appendix No. I.
    ${ }^{4}$ Ins. at Sudi, No. 24 of V., p. 86. The minister was named Naga Deveiya; his titles are "Máni vegade," or honourable lord, "Danda nayaka," or general of the army, lord of the great Samantas, chief of the Amatya Pada, or great officers like Yamata Chol, the humbler of Bhoj, Bhujanga, Ahe devipa, Gurjara, \&c. Having received the district of Swanur (now Savanur, or Shaunoor), in which Sudi is situated, by a copper grant, he builds a temple to Nagariswar, and endows it with part of his recently-acquired possessions, recording the grant on a stone, the one now extant. The situation of Puliyappayana has not been ascertained. It is probably south of the Tunga Bhadra.
    ${ }^{5}$ Ins. at Anigiri, No. 5 of VI., p. 133.

[^5]:    ${ }^{1}$ The open dry country, in opposition to the hilly rice eountry bordering on the Ghats. Lakmeswar and Anigiri are situated in a fertile black plain, called Belavel, par excellence.

    2 "The date of this time is obtained by taking the eelebrated gunas, (or three qualities), the labda (or nine units), the randlra (or nine apertures of the body), Virodlikrutabda chytrmas, \&c." The figures above given, written in reversed order according to rule, give Saka 993, exactly corresponding with Viradhikruta. A small village named Kakargudi is still found on the south bank of the Tunghladra, between Hurryhur and Dawangiri.
    ${ }^{3}$ Ins. at Gadaya, No. 40 of VII., p. 235.
    ${ }^{1}$ Ins. at Tengli, p. 263. Do. do. Yedravi, p. 223. The Hala-Kanarese word "Manishi" means rubbing out, as figures are swept out of the sand by schoolloys.

[^6]:    ${ }^{1}$ Ins. at Galganath, No. 10 of VII., p. 185.
    ${ }^{2}$ Ins. at Yelwatti, No. 18, p. 202. Who Balavarasa and Kanama were, we have no means of ascertaining.
    ${ }^{3}$ Now Arasu bidi, in the Hungunda Taluka. ${ }^{4}$ No. 92, p. 338.
    ${ }^{5}$ No. 7, p. 179. Angabhogam, her private allowance, or pin-money. Nerigal, in the Hangal Parganal, is styled an ancient Agraharam. It is one of the richest villages in the country. ${ }^{6}$ P. 263.
    ${ }^{7}$ Ins, at Nerigal, in the Dambal Parg., No. 135, p. 395. Ycrabaragi is now Yelburga, in the Nizam's territory. Goveya is the old name of Goa. The invader was probably the fourth Bellala, Vishnu Verddhana, and grandfather of Vir Bellal, who afterwards subjugated the southern provinces of the Chalukya kingdom.

[^7]:    ${ }^{1}$ Ins. at Harsur, No. 10 of II., Kalabhurya, vol. ii. p. 46. Kalgi, No. 15, do. do. p. 52.
    ${ }^{2}$ Ins. No. 6. The royal style and titles invariably ran thus: "Sri prithivi wallablatmaha-raja diraja-raja parameswara-param Chataraka," de. In the Ins. of Saka 1083, he is only styled Malá Mandaléswar.
    ${ }^{3}$ Ins. at Kemblavi, No. 3 of X. p. 535. + Ins, at Pattadkal, No. 9, p. 544.

[^8]:    ${ }^{1}$ Ins. No. 4 of XI., p. 559. Ballam was founder of the Yadava dynasty of Dévagiri.
    ${ }^{2}$ Ins. at Ablur, No. 17 of Vijala, vol. ii. p. 33.
    VOL. IV.

[^9]:    ${ }^{1}$ Rana Ragala lias the title, "Hara Cherana rajáa," fixing lis desire on the feet of Hara ; Soméswar III. is said to rejoice in the worship of the feet of Hari Hara, and of the lotos-born Brahma; Soméswar Bhatta, the chaplain of Vikram II., bears the tit.e Araddlya, which is peculiar to Seivak priests, and he makes a grant to a temple of Siva, p. 235. But on the other hand, the grant of Vikramaditya, p. 7., records that the rájá, laving taken comsel from lis own spiritual guide (Sivaçura), Neravidya Pandit Yatipati, bestowed a gift on the Jinendra of Pulikara Nagara; from which it appears the guru was a Jain, Yati being the distinctive title of that priesthood.
    ${ }^{2}$ Ins. No. 1. of I., p. 10. He is called "Vishn Kula talaka, phanna mani Kirana vibhasura Nagavansa udbhava," the pride of the poisonous tribe, born of the jewel-adorned, hood-ornamented Suake race.
    ${ }^{3}$ Ins. at Yedravi, No. 31 of VII., p. 223. Nagavi, No. 27 of V., p. 92.

[^10]:    ${ }^{1}$ According to the Jain Guru of Malkheir, they were hereditary nobles, or Mandaléswars, of the province of Kalyán.
    ${ }^{2}$ Ins. No. 4 of II., vol. ii., p. 41.
    ${ }^{3}$ The titles of Vijala before he effected his usurpation were, "Mahá Mandaleswara, the great lord of Kalanjra pura, with the ensign (diraja) of the golden bull, damaruga turga nirghoshanam, (?) the sun of the lotos tribe of Kalachuris," \&c. Maha Mandaléswar is the title of all the great nobles. Kalanjrapur is Kallinger in

[^11]:    ${ }^{1}$ Vijala Kavya, Book I.
    ${ }^{8}$ Ibid. Book III.
    ${ }^{2}$ Ibid. Book II.
    4 Books XI. and XII.

[^12]:    ${ }^{1}$ No. 2, at Gadaja, vol. ii., p. 115 ; No. 11, at Anigiri, vol. ii., p. 130 ; No. 23, at Harihara, vol. ii. p. 141. The legend, more in detail, is as follows:-"In the glorious Yadu Kula, as the sun rises from Udayachal, so arose the famed Sala, residing in Sasakapura. In the gardens of that town, a Bratipati or Yati, sitting at tapassya, was attacked by a tiger (Puli), a beast (Shardula) with dreadful eyes, fearful teeth, and lashing his sides with his tail. The Muni gave the heroic Sala a weapon, blessed it, and said, 'Saladu Poi,' ('draw and kill'); on which, unsheathing the sword, he killed the shardula. Hence the name Poisala, or Hoisala, \&c." Ins. p. 115.

    The effigy of a man killing a tiger, is carved and placed over many of the

[^13]:    ${ }^{1}$ Ins. at Anigiri, No. 11, p. 130. The description of this battle is very lively and spirited: "Boasting of his elephants, his horses, his men, Balam Niapa exclaimed, 'Who dares oppose me?' Belal, mounting his single clephant, urged it onwards; and trampling down his army, pursued him, and slew him, chasing him from Surtur to Lokigonda, and exclaiming, 'Yelle,' (a contemptuous exclamation,) ' I , who like Chaladanka (the persevering or fierce) Rama, cutting off the Dasasur (Ravana), have used Varala, Sala, Kerala, Magadha, Andhra, Goula, Khasa, Gurjara, Angakalinga, Bhupatis, like targets for my bow,-what difficulty have I in destroying you ?' "
    ${ }^{2}$ Ins. at Herur, No. 16, vol. ii., p. 141. There is a place named Talakul, near Surapur, but this seems too far north for Bellala's limits, all the country north of the Krishna being, at this time, in undisturbed possession of the Dévagiri prince. The other places are all to the south.
    ${ }^{3}$ Ins at Satayanhali, No. 13, vol. ii., p. 136.
    ${ }^{4}$ Ins. at Harihara, No. 23, vol. ii., p. 147. ${ }^{5}$ Yelburga, Nizam's territory.
    ${ }^{6}$ Near Raichar. ${ }^{7}$ Panangal, or Hangal ?
    ${ }^{8}$ Now Rettihali, in the Rana Bidnúr Talúk.
    ${ }^{9}$ Near Dambal, the Jaghír of the Dambal Desayi. ${ }^{10}$ Near Harihara.
    ${ }^{11}$ Dúrga is now applied, par excellence, to Chittledrúg.

[^14]:    ${ }^{1}$ Ins. No, 23, p. 147.

[^15]:    ${ }^{1}$ Ins. at Manoli, No. 2 of IV., vol. ii. p. 225. I think, too, that they adopted the lanshana, or symbol of the tiger, or shardula. The ruins of a magnificent temple, much mutilated, in the fort of Bantapur, and which was, I believe, of the time of Simha (but I have mislaid a long inscription obtained there), is covered with the head of the fabulous animal called shardula, or simha, employed as an ornament in every part.
    ${ }^{2}$ See two Ins. at Mulgi, No. 1 of I., vol. ii., 154.
    ${ }^{3}$ The inscription is here rather defaced; the omissions should probably be filled up with, "the Ratta Kula became illustrious, and to them succeeded the," \&e.
    ${ }^{4}$ No. 4 of I. vol. ii., p. $159 . \quad{ }^{5}$ Ins. at Anigiri, No. 2 of I., p. 156.
    ${ }^{6}$ Ins. at Multgi, No. 1 of I., vol. ii., p. 154. Tenavaligi is the modern Tibhawali, a small Parganah and Kusbah, between Hangal and Kode.

[^16]:    ${ }^{1}$ Ins. at Belgami, in Mysore, No. 3 of III., vol. ii., p. 174. His other titles in this are, " the ankoas of the elephant-like Rajás of Gurjara and Malava, and the confirmer or ally, (sttrapanacharya) of the Telunga rája," referring, perhaps, to the Arrdhra sovereign.
    ${ }^{2}$ Ins. at Manoli, No. 7 of III., vol. ii., p. 177. In this is found, among his titles, "the sun expanding the lotus-like Jayatuka kula," in allusion to his father's name.
    ${ }^{3}$ Ins. at Telwalli, No. 199, III., vol. ii., p. 191. For an account of Bhoja, see genealogy of Kolapur Chiefs, and Bombay Transactions, viii., 396.

    * Ins. at Rettilala, No. 20 of III., vol. ii., p. 197.
    ${ }^{5}$ Ins. at Yelawal, No. 34 of III., vol. ii., p. 213.
    ${ }^{6}$ The last inscription of Simha that l:as been obtained, is dated Saka 1169; he had then reigned thirty-eight years. There are only four relative to Kanner, none of which mention the year of his reign.

[^17]:    ${ }^{1}$ Colonel Briggs supposes Ram Rája to have been king of only a part of the Dekkan, but we have seen from the inscriptions that his power extended from the Nermada to the country south of the Tungabhadra. Briggs, Ferishta, i., 304, note。
    ${ }^{2}$ Briggs, Ferishta, vol. i., p. 304-8.

[^18]:    1 The loves of the prince and princess are stated by Ferishta to form the subject of a celebrated Persian poem, by Amir Khusro Dehlivi.
    

[^19]:    ${ }^{1}$ Briggs, Ferishta, vol. i., p، 378. ${ }^{2}$ Ibid. p. 381. ${ }^{3}$ A. H. 718. It is p، 389.
    ${ }^{4}$ Ïbid. p. 403, 4, 5.
    ${ }^{5}$ ILid. p. 420.

[^20]:    ${ }^{\text {I }}$ Now Walwa, uear Kolapúr. ${ }^{2}$ Vijala Cheritra, Book xii. ${ }^{3}$ Vol, ii., p. 174.
    ${ }^{4}$ Pannala is the hill-fort above Kolapur, a yery strong place.

[^21]:    ${ }^{1}$ There is a celebrated temple at Banawassi in commemoration of Madhu Kaitabha, dedicated to Iswar, and another at the neighbouring town of Anivatti, sacred to the same deity as Kalabhiswar.
    ${ }^{2}$ I at first thought this to be the old name of Adur, but in the inscriptions at that place it is written Padiyur.
    ${ }^{3}$ Ins. No. 78 of VII., Chaluk, p. 308 ; also No. 7. do. do. p. 179.

[^22]:    ${ }^{1}$ Ins. at Adur, No. 10 of IV., Chaluk., vol. i., p. 34. Ditto, No. 2 of V., p. 52.
    ${ }^{2}$ Ins. at Madur and Belgavi, Nos. 8 and 9 of V., Chaluk., p. 62, 3.
    ${ }^{3}$ Ins. at Belgavi, No. 10 of VI., Chaluk., vol. i., p. 145.

[^23]:    ${ }^{1}$ This is now borne by the Shenkar Charti Swami, the Guru of the Smartha Brálımans.
    ${ }^{2}$ The Saptati Matrah, or seven Saltis, are Brálnni, Mahéswari, Konmari, Varshnuvi, Varahi, Indrani, Chamundi. Shemmukh.
    ${ }^{3}$ The Solauki Gotracharya, as given by Colonel Tod, differs wholly from this enumeration of the Chalukya titles, viz. : Madwani Saeka; Bardwaj gotra; Gurh Lokoti nekas; Saraswati nadi; Shamveda; Kapliswar Déva; Kardumau Rikéswar; Teon Purwar zenar; Kconj Dévi; Maipal putra. I. 97.

    In another inscription is the following verse: "Who shall relate the praise, the eminenee, of the former Clálukyas, who aequired the Mayura Dwaja from Tarakaveiri (Shemmukh), tho Varaha mudra from Padma lochana (Vishnu), the lofty chhatra from Bhagavat Katiyayani, and with these insignia governed the world. Nagari, p. 107.

[^24]:    ${ }^{1}$ Vishuu.

[^25]:    ${ }^{1}$ Independent of $o u$, om, ah, áh.

[^26]:    ${ }^{1}$ Nearly the pronunciation of the third person plural of the $\mathbf{P}$. of the Indicat. of the Hindústani verb, to be; hueen, hein,

[^27]:    ${ }^{1}$ The Burmans believe that certain incantations render them invulnerable, and their arms irresistible.

[^28]:    ${ }^{1}$ From information obtained at Martaban, Pegu, \&c.
    ${ }^{2}$ The rolls alluded to are in my possession.

[^29]:    ${ }^{1}$ Agreeable to their mode of reckoning, as before noticed.

[^30]:    ${ }^{1}$ Allowing for three grown-up persons.

[^31]:    ${ }^{1}$ Mr. Maingy.
    ${ }^{2}$ Major Burney.

[^32]:    IHe was killed by a shell when superintending the operations at Denobyú.

[^33]:    ${ }^{2}$ The Malayan title for a throne.

[^34]:    ${ }^{1}$ The expression, "British Government," here and elsewhere used in this work, is perfectly applicable; although the local administration be that of the East India Company; for other nations naturally look to the fountain of power for the responsibility attached to the local exercise of it.

[^35]:    1 The Siamese, so long ago as 1511 , claimed Malacea from Albuquerque.
    ${ }^{2}$ A Malayan state, bounding the British territory of Wellesley Province at the Krean river, on the south.

[^36]:    ${ }^{1}$ The Sanscrit scholar will here observe, that the natives of these regions had long ago adopted Indian titles, this one being the name of a Hindú prinee, Darmasoka Rájá.

[^37]:    ${ }^{1}$ Every third year ambassadors go to Pekin from Siam, bearing a tree of gold and another of silver, as marks of mominal vassalage. They assume the Chinese dress.-Crawford's Siam.

[^38]:    ${ }^{1}$ The first under Jolin Anderson, Esq., of the Penang Civil Service; and the last one under the writer of this account.

[^39]:    ${ }^{1}$ It has been stated by an author, whose name does not occur to me at present, that the Malacca Peninsula could not have been the golden Chersonese, because it does not yield gold. This, however, is an error : many thousands of persons, both Chinese and Malays, 'are annually employed in working the gold-mines of Patani and Calentan. There used to be a considerable importation of gold-dust from these to Penang; but, since the Siamese influence has prevailed down to the fourth parallel of N. latitude, this trade has been destroyed.
    ${ }^{2}$ In Europe the same extent of population might require 800 births, at leastwhile the deaths would probably be greater in many places.

[^40]:    ${ }^{1}$ At this time Canute the Dane reigned in England. ${ }^{2}$ Ganésa.
    ${ }^{3}$ The river Ganges (personified as the daughter of Rájá Jahnu) having descended from Heaven at the request of Raja Bhagiratha, the descendaut of Rajáa Sagara, was swallowed by Jahnu, but afterwards let out of his right leg. Hence called "Jahnavi."
    ${ }^{4}$ Jimútakétu was a Vidyadhara, or demi-god.-Vide Note A.
    ${ }^{5}$ Vide Note A. ${ }^{6}$ A serpent so called.
    7 The bird of Vishnu, the prince of birds.
    ${ }^{8}$ Silára (शीलार).

    - "Sila," a rock; "Ahar," food eaten, \&c. Vulg., "Shilar," "Selar," \&c. Many Mahrattas have this surname.
    ${ }^{10}$ There appears to be some omission in the original, and Laghu Kapardí refers to Pulasakti, whilst the name of his son is not specified.-H. H. W.

[^41]:    ${ }^{1}$ I have not been able to ascertain the site of this place.
    ${ }^{2}$ These appear to be names of Karnatkis from the termination pyya, \&c.
    ${ }^{3}$ Minister for peace and war.
    ${ }^{4}$ This person is a native of Karnataka. See 3, or this person had charge of the Karnatic affairs.
    ${ }^{5}$ Death personified, "Yama." ${ }^{6}$ Or lawful and unlawful.
    7 In the original, Samvat is also here introduced, perhaps by mistake; but Saka and Samvat, I am told, are both used alike for Salivahana's era, in the old Dekhin books.
    ${ }^{8}$ Kshya happens in 1728 Saka; hence it is quite correct.

    - Probably a mistake of the engraver, for vadha or the dark half.

[^42]:    These are different mansions of hell, of various degrees of misery and torment.
    ${ }^{2}$ Great Sovereign.
    ${ }^{3}$ These Nagas, or serpents, could assume human shape at will.

[^43]:    ${ }^{1}$ The infernal regions. ${ }^{2}$ Does not appear to have reigned.-H. H. W.
    ${ }^{3}$ These two circumstances are doubtful.-H.H. W.

[^44]:    ${ }_{1}$ Both these manuscripts are now in the library of the Royal Asiatic Society, and it is hoped that they will shortly be published,-Ed.

[^45]:    ${ }^{1}$ Elgas.

[^46]:    ${ }^{1}$ 1835, of the Christian æra.

[^47]:    ${ }^{1}$ Nativity of Mulammed.
    2 The Alfyyyal, a Grammatical poem, by Abu Abdallah Ben Malik, the text of which, with a eommentary in Frenel, by Baron de Sacy; was published by the Oriental Translation Committee,-Ed.

[^48]:    ${ }^{1}$ Vide p. 120, Tomgrut.

[^49]:    ${ }^{1}$ God of the sea.
    ${ }^{2}$ God of arms.
    ${ }^{2}$ Or evil spirits.

[^50]:    ${ }^{1}$ Acts of devotion. $\quad{ }^{2}$ In the Bhagavata she is called Satyavati.

    * He is supposed to have lived about the year 2825 of the world.

[^51]:    ${ }^{1}$ In the Bhagavata she is called Chitrangadai.

[^52]:    1 The one alluded to in the following Article, and of which another interpretation, by Professor Gesenius, will be found at page 151 of this volume.

[^53]:    ${ }^{1}$ See Society's 4to. Transactions, Vol. III. p. 548.
    ${ }^{2}$ That the Celtæ are a colony of Phonicians, and the Irish language a dialect of that spoken by the Tyrian Phoenicians, is also, I trust, clearly demonstrated.
    ${ }^{3} \mathrm{Or}$, wise and considerate people.
    4 The Irish word, capc, means the sun, heaven, the rainbow, red, brilliant, shining, produce, tribute. Capcad is replenishing, flling, renewing.
    ${ }^{5}$ Canc»pll, a support prop, pillar, defence, protection, from which attributes, possibly, the deity was called, or these words had their origin from his name.
    ${ }^{6}$ IFrir is the Irish word for hell, or the infernal regions. Ifrinach, is a devilish person, and by some of the old Roman Catholic controversialists applied to the Protestants. Bonaventura O'Hose calls the Catholics, Aifvinigh, or people of the mass, the Protestants Ifrinigh, or people of hell. If you compare the characters on the stone with the common Irish alphabet now in use, the similarity cannot but strike; but with the ancient MSS. it is still more palpable.

[^54]:    ${ }^{1}$ This seems to have been a title of honour. Passow's Lexicon.
    ${ }^{2} \Sigma \nu \mu \beta o \lambda o \nu$, probably of the nature of the Tessera Hospitalitatis.
    ${ }^{3}$ Ap. Athenæum, xii., 41. ${ }^{4}$ Theopompi Fragmenta a Wichers, p. 85, 197.

[^55]:    ${ }^{1}$ It appears, from recent accounts, that the Chinese government are deliberating on abolishing the ineffectual prohibition of opium, and on substituting a regular duty upon its admission.-Ed.

[^56]:    1 A new biography of Muhammed, chiefly drawn from the four works above. mentioned, and other hitherto unpublished sources, is the first of a series of biographies of great Moslem monarchs during the first seven centuries of the Hijrat, the first volume of which is to appear next Easter, at Darmstadt, sold by Leske.
    : ${ }^{\infty}$, Hijrat, not Hegira, is by no means to be translated by fight, but by emigration, as the prophet never could confess a flight, but only an emigration, which is also the true sense of the word; from the same root comes the name of Hajar, $\underset{\sim}{\sim}$ (the emigrant.)

[^57]:    ${ }^{1}$ Two swords presented to Sir John Campbell by the Shah of Persia, were valued at 200 ducats each, or about 86l. And the Umeer of Scind had a large sword, for which he refused 9000 rupees, equal to 900 .

[^58]:    ${ }^{1}$ I gave a specimen of Salem steel to an experienced forger, who attempted to work it at various heats without suceess, and at length deelared it to be incorrigibly bad, and perfectly useless for any purpose. I then tried another portion of the same steel myself, and found it could be worked with little more difficulty than ordinary cast-steel; thus proving that, in experiments of this nature, we should never be satisfied with the opinion of one person only, however skilful. These cakes, however, appear to differ very much in quality, and are decidedly inferior to the Cutch steel.
    ${ }^{2}$ Sulphuric or nitric acid diluted with water may be used for this purpose; but immersion in a bath composed of a solution of sulphate of copper in water, in the proportion of one ounce to a quart, produces a better effect, and exhibits the crystalline arrangement perfectly. The surface of the metal must be previously freed

[^59]:    from grease, either by rubbing with wood-ashes and water, as in India, or by smearing it over with a paste of chalk and water, and allowing it to dry on: the time of immersion may vary from ten minutes to half an hour.-H. W.

[^60]:    1 "Che il suolo di questa grotta tramanda continuamente una gran quantità di gas acido carbonico, la cui altezza appena arriva ad un palmo."-Ab. Romauelli, parte seconda, p. 98.
    ${ }^{2}$ Rees's Cyclopadia, article, Grotto del Cane.

[^61]:    ${ }^{1}$ Pliny lib. 2, cap. 93.
    ${ }^{2}$ Viaggio a Pesto, \&c., dell' Abbate Domenico Romanelli, parte seconda, p. 100.

[^62]:    ${ }^{1}$ Commonly called T'hegs, or T'hugs.

[^63]:    ${ }^{1}$ Nishán, a sign.-Persian.

[^64]:    ${ }^{1}$ To those who doubt the veracity of Ctesias, and deny his authority on historical questions, I would recommend a candid and unbiassed consideration of the circumstances under whieh he wrote his history, and of the arguments in favour of his general veracity addueed by Stephanus, in whose opinion I fully agree :-"Qui melius, qui certius de rebus Persicis seribere potuerit quam Ctesias, arbitror fuisse neminem." From what is recorded by sacred and profane authors, we have reason to believe that the Chronieles of the Kings of Assyria and of Persia were written and preserved with the greatest attention. See Ctesias, Herodotus, Moses of Chorene, and the books of Ezra, Esther, \&c., \&e. "Such," observes Van Heeren, "was the origin of the Chronieles or Diaries of the Persians, which, being deposited in the principal eities of the empire, Susa, Babylon, and Eebatana, formed what were ealled the Archives of the lingdom. A history compiled of sueh materials, would neeessarily be a history of the Court, rather than of the empire; and fragments of Ctesias serve to eonfirm this idea."-Hist. Researches. This should be borne in mind throughout the following pages.
    ${ }_{2}$ This date is made out as follows:-
    It is stated by Diodorus, on the authority of Ctesias, that there were ten kings, inelusive, from Arbaees to Cyrus, viz. : -

[^65]:    king of Media, and the Medes, till their defeat, were the paramount power in Upper Asia. But in writing a chronological list of lings, in whieh Cyrus succeeds Astyages, either the first years of the reign of Cyrus, or the last years of that of Astyages, must be omitted; or the chronology deducible from the two together would be incorrect. If then we suppose that the sum of the four Median kings of Herodotus, eommencing in the jear B. c. 710, and amounting to 150 years, ended with the first regual year of Cyrus, we shall have for the date of that event the year b. c. 560, which exactly corresponds with the received chronology. But the Median power, which is not introduced in a elronologieal series, actually continued until itfell before Cyrus, in 554, as above stated. Its duration, therefore, counting from the establishment of the Median kingdom, in B. c. 710, would be exactly 156 years, as it is correctly represented by Herodotus,-See Diod. Sic., Herod.

[^66]:    that ever summoned a king of Persia to the field, expressly says that the standard of the empire was a golden eagle. And so says Q. Curtius. I consider that the Persians have made up of facts, which are fundamentally true, a story which is wrong in its application. I think that the hero of the Leather Apron was Artaxerxes, or Ardashir, who subverted the empire of the Parthian kings, and founded the Sassanian dynasty of Persia, A. D. 226, and who was, as Vaillant says, Cujusdam Persx viri infime sortis, et coriariam quidem exercentis filius.

[^67]:    ${ }^{1}$ Firdousi tells us, that Menucheher made Nozer king of Persia before his own death, and recommended him to the counsels of two famous Persian warriors, Sám and Zál, in ease of an attack from the tribes of Turán, which I think favours the opinion here expressed, that he was himself departing to another part of his empire. Firdousi, however, it must be acknowledged, says he was dying.

[^68]:    ${ }^{1}$ The following is a specimen of the discrepancy between the sereral trans-lations:-
     ${ }^{\circ} \rho \eta$ M $\eta$ $\delta \omega \nu$.
    2. Vulgate.-Posuitque cos in Hala, et in Habor, juxta fluvium Gozan, in civitatibus Medorum.
    3. Chaldee Paraphrase.-Et collocavit eos in Hhalah, et in Habor, fluvio Gozan, et urbibus Madai.
    4. Arabic Paraphrase, (Translation) with which the Syriac agrees.-Et habitare fecit illos in Hilah, et in Habor, fluminis Gozan, \&c.

[^69]:    ${ }^{1}$ It is obvious that Calachena is a very different word from Halal, and we have no authority for identifying the mountain Chaboras of Boclart with the Habor of Scripture, which is said to have been a town or river. The objection is less with regard to Gauzania, except that the Gozan of Scripture history is said to be

[^70]:    situated near the river Habor, whereas the stream which flowed by Gauzania, is known in the pages of ancient history by no other name than that of Cyrus. However we have no authority for supposing that Aria was the ancient name of Media. It is, indeed, asserted by some geographers, that the Medes were once called 'Apoor, Arians, as were our ancestors once called Saxons and Normans, \&c. But it is nowhere said that the country of the Medes was ever known by the name of Aria. We are indeed told by the Whistons (Amotat. in Moses Chorenen. Hist. Armen.) that the name is derived from a word signifying, "Bold, Courageous," which would account for the Medes being called Arians, but would not authorize the assumption that their country was called Aria, and might therefore be identified with the Hara of Scripture. The Aria of the ancients lay to the east of the province of Khorasan, iu the direction of the Seistan of the modern Persians, which is famous from having been the principality of Zál, and the great heroes of Persian history, who lived, as has been shown, about the time of the captivity of Israel.

[^71]:    ${ }^{1} 2$ Kings xvi. 9.
    2 "And the king of Assyria brought men from Babyion and from Cuthah, and from Avah, and from Sepharvaim, and placed them in the cities of Samaria, instead of the children of Israel."-2 Kings, xvii. 24.

    With regard to these places, they may still be traced in the countries adjoining Mesopotamia and Assyria. Babylon is well known. Cuthah, served. Thus the Kamoos $\ddot{\theta} \boldsymbol{j}$ بالٌ2 Irák, or Babylouia." Avah NIV I, ع is, I imagine, the Auchanitis regio of the ancients, situated above Bahylon, on the right bank of the Euphrates. (Nitis is an affix, which subtracted leaves Aucha, which is perhaps the nearest form by which the Greeks and Romans could represent the guttural sound contained in the Hebrew

[^72]:    ${ }^{1}$ I should perhaps except the modern Samaritans, or Sichemites, who claim descent from Ephraim and Manassel. "We believe in Moses, and in Mount Gerizim. We have priests of the race of Levi, descended in a right line from Aaron and Plineas. We are all of the tribe of Joseph, by Ephraim and Manasseh, and of the tribe of Levi; our habitation is in the Holy City of Sichem al Gaza." See Letter addressed by the Sichemites to the Jews of England.-Basnage.

[^73]:    ${ }^{1}$ Others of them have a different story from what was told me. Wolff says, "I went with Mr. Stevenson among the few Benee Israel, children of Israel, who are resident at Poona. They are totally distinct from the rest of the Jews in Europe and Hindostan. Soon after the destruction of the first temple, they came in seven ships (thus they relate their own story,) from Arabia, into Hindostan, where they lave since forgotten their law, but continue to repeat in Hebrew certain prayers. They have synagogues, but they have not in them, like the rest of the Jews, the Sephar Torah, or five books of Moses, written upon parchment."Researches, p. 494.
    ${ }^{2}$ This, however, is not a general sentiment. I have reason to believe that a considerable part of them disclaim, in toto, the name of Jew, and maintain that they are not Yahudi, but Bení Israel.

[^74]:    ${ }^{1}$ This is the Chinese pronunciation ; they are considered by De Guignes and others to be the Jetæ, or Getx.
    ${ }^{2}$ Although history is silent on this subject, in itself sufficiently obscure, there is every probability that the Yue-Chi were the ultimate destroyers of the Greek power in India. They had already subverted the Bactrian empire, or at least occupied the provinces of which it was formed, and the country which they afterwards subjugated in India, is exactly that which had been subdued and ruled by a branch of the Greek dynasty of Bactria. This branch, amongst whose lings we find the names of Apollodotus, Demetrius, and Menander, was opposed to the Bactrian government, which was looked upon as that of usurpers; indeed, it was owing to

[^75]:    * Since penning the above, I rejoice to think that this presentiment, which I cherished ten years ago, is now likely to be realized by the extraordinary discoveries resulting from the researches of Messrs. Masson, Ventura, Swiney, Burnes, and others.

[^76]:    ${ }^{1}$ This had already been suspected by Major (now Col.) W. H. Sykes; the following note refers to the object under discussion.
    "My dear Sir,
    "Very many thanks for the inscriptions. You would oblige me could you let one of your people copy the Thibetan alphabet for me. I have no doubt of being able to identify every letter of the alphabet from the inscriptions on the Nanee Ghaut.
    " I have read your paper with much interest, but am not quite satisfied with respect to the Greek inscriptions on the Cutch Coins. The, apparently, Greek letters observable, are found in the Boodlu inscriptions, and in the Thibetan alphabet. The coins may possibly be those of the Boodlı Monarchy, which must have existed on this side of India.
    "I hope to be able to communicate something interesting to you respecting the inscriptions ere the next rains.
    " Very sincerely yours,
    W. H. Sykes."

[^77]:    ${ }^{1}$ By a singular coincidence, Col. Tod has commenced from the same point, a circumstance which adds considerably to my confidence in its correctness: he does not mention his reasons for doing so.
    ${ }^{2}$ In two or three instances the dots seem to be omitted, and, in one instance, they occur in the middle of the legend.

[^78]:    ${ }^{1}$ The Chinese have no sciences, and their religion, and most of their laws, are derived from the Indians; Nay, they are of opinion that the Indians taught them the worship of idols. Renaudot's Ancient India, p. 36.

    We have already seen that these Indians were the Yue-Chi, settled in India,

[^79]:    * Sce Vol. II. p. 378.

[^80]:    ${ }^{1}$ Siva. $\quad{ }^{2}$ The word Karnátaka does not appear in the original, and

[^81]:    ${ }^{1}$ Karaháta and other countries having passed Ganja. (¿)
    ${ }^{2}$ Meritch or Mirij, in the Dekkan.
    ${ }^{3}$ This has no meaning, and may be intended for a name, the Guvala of the inscription in the "Bombay Transactions."-II. II. W. a Iron goad.

[^82]:    1 "Sveta Chatra" in original.
    ${ }^{2}$ Or greatest prince of the Tagara country; probably this means greatest prince of those who are deseended from the kings of Tagara-pura.
    ${ }^{8}$ Meaning the hill-fort of Kiligila. The text adds his capital Rajadhání. H. H. W.

[^83]:    ${ }^{1}$ In this article Colonel Sykes' mode of spelling Indian ternis and proper names has been followed.-Ed.

[^84]:    ${ }^{1}$ From si thirty, and roz day.
    ${ }_{2}$ I am indebted to Manalijí Kharshedji, M. R. A. S., for aiding me in procuring some of the copies whieh I have used.

[^85]:    ${ }^{1}$ On the status of Hormazd among the Parsis, there are some remarks in my lecture on the Vendidád Sádé, pp. 9, 10, 11.
    ${ }^{2}$ On the day of Bahman, as likewise on three other days afterwards mentioned, the Pársís eat no flesh. They are not forbidden, however, the use of fish.

[^86]:    ${ }^{2}$ This is one of the four days of the month on which the more "devout" of the Pársis repair to the fire-temples.
    ${ }^{2}$ Or take a short voyage.

[^87]:    ${ }^{1}$ The preceding seven days are sacred, it will be olserved, to the seven Amshaspands, viz., Hormazd, Bahman, Ardebehisht, Sháravar, Sphandarmád, Khurdid, and Amardád. The days which follow are sacred to the Izads

[^88]:    ${ }_{3}^{1}$ On this day the fire-temples are frequented. ${ }^{2}$ Or Aban.
    ${ }^{3}$ Or quadrupeds.

[^89]:    ${ }^{1}$ Hence no flesh is eaten on this day.

[^90]:    ${ }^{1}$ The upper vest, as distinguished from the Sadar, or perhaps, a complete suit.
    ${ }^{2}$ This day is sacred to the worship of fire.
    ${ }^{3}$ He is generally spoken of as Rashné-rast.

[^91]:    ${ }^{1}$ No animal food is used on this day.
    ${ }^{2}$ Kismat, incorrectly written Khalwat, in some copies. ${ }^{3}$ Or Bad.

[^92]:    ${ }^{1}$ The Pársis, in their more serious compositions, thus denominate their religion.

[^93]:    ${ }^{1}$ Kempfer's Japan.
    2 "The king has horse-guards composed of men from Meen (perhaps meaning Míng-mon) and Laos, as numerous as the king pleases. 2ndly. A foreign guard of 130 gentlemen, i.e., two companies of Moors, uatives, or originally descended from the Mogul States, of an excellent mien, but accounted eowards. 3dly. Twenty Chincse Tartars armed with bows and arrows, aud formidable for their courage; and lastly, two compauies of twenty-five men each, Peguans of the true India, called Rasbouts, or Raggibonts (Rajpoots), whose courage is very famous, though ouly the effect of opium.
    "The Siamese are ignorant of the art of war, abhor blood, only war on their encmies, because these are more cowardly than themselves; have no forts deserving the name, no standing army, no artillery, and their infantry are uaked. They use elephants, never come to close quarters, and are afraid to become over courageous. They are weaker by sea than by land."
    ${ }^{3}$ The Muda river, on the coast of Keddah, opposite to Penang.

[^94]:    ${ }^{1}$ Under the author of this account.
    ${ }_{2}$ The author of this account.

[^95]:    ${ }^{1}$ Under the writer of this account, who commanded also the party of troops.

[^96]:    ${ }^{1}$ Mahosat was prime-minister to King Thau Withí, whose object it was to carry off the daughter of another prince, whose name was Chalaní. This latter prince was guided in his operations by the advice of his prime-minister Takíwat. The war is carried on principally underground, by mining and countermining. Thau Wíthí gains the day.

[^97]:    ${ }^{1}$ Priests make nearly one per cent. in the population of some provinces. The settlers, or descendants of settlers, are about 10,000 Peguers, as many Laos and Cambojans, and some Cochinchinese; also about 500 natives of India, and a few native Christians.

[^98]:    ${ }^{1}$ They have a few small horses.-Mr. Crawfurd's embassy.

[^99]:    ${ }^{1}$ Mr. Crawfurd, in his instructive account of Siam, notices, that those nations which have adopted Buddhism have not been famed for prowess. If such be the case, this iujunction may have been one cause.

[^100]:    ${ }^{1}$ Are not this grose and Leda's swau twin brothers?
    ${ }^{2}$ Asiatic Researches.

[^101]:    ${ }^{1}$ The Siamese represent this tree with virgins on it growing out of the flowers.

[^102]:    ${ }^{1}$ The proofs to estallish this opinion are briefly and ably set forth by Bochart ; and as arguments are here adduced to show their insufficiency, the following passage may not prove uninteresting:-
    "Linguam Hebraicam omnium esse antiquissimam docent etymologire nominum, quotquot extant in historiâ Mosis, a mundi creatione, usque ad dispersioneun gcutium. Sic Hortus ער Eden Hebreis est 'Hortus voluptatis, sive deliciarum.' Terra 7 J Nod, 'Terra exilii,' quia ibi exulavit Cain. ไבコ 'Confusio,' quia
     Adama, scu terrâ, factus est. הוה Eve, a vitâ, prima mulier, quia mater omnium viventium. ק Cain, unus e filiis, ab acquirendo, quia dixit mater, קנית Aequisivi virum a Domino. Alius $\boldsymbol{\Omega} \boldsymbol{U}$ Seth, a ponendo, quia dixit, $\boldsymbol{U}$ posuit mili Deus semen alterum. דנוך Enoch, a dedicando, quia natus in ipsâ dedicatione urbis quam ædificavit Cain. Alterius Enochi filius Methuselah anno diluvii mortuus, id significat ipso nomine, quod illi a patre inditum prophetico spiritu. פלג Plaleg est a dividendo quia in diebus ejus divisa cst terra. Taceo allusiones ex Hebreeâ liuguâ petitas, ut cum de Noâ dictum est 1 วung' 'Cousolabitur nos,' et de Japheto יפח אלהיפ ליפת Dcus dilatet Japhetum."

    The arguments against the Chaldees, who have the same claims as the alove, are founded by Bochart on the expression used in Geuesis ii. 23, which is intelligible only in the Hebrew : "Vocabitur vira, quia ex viro sumpta est. Hebraice, ut שיׁ Is pro viro, ita ה

    It will be observed that the objections, which are confined in our text to the example of Noalı, are cqually applicable in all the above cases.

[^103]:    ${ }^{1}$ Speaking of Mount Ararat, Tavernier, who travelled through Armenia in the seventeentl century, says, "Mont Araxat, que les Arméniens appellent Mesezousar, c'est à dire Montagne de l'Arche. Aussitôt les Arméniens la décourrent, ils baisent la terre." -Voy. de Taver. v. i. c. 2.

    Also Bochart: "Communis sententia hæc cst, Ararat essc Armeniam."Phaleg. lib. iii. c. 3; in which he has expressed himself at length on this point.

    Bryant also in like mamer; he derives Ararat from $7 \boldsymbol{7} 7$, Harirad, which signifies àroßarŋ́plov, the Mountain of Descent.-Vol. iii. p. 4.

[^104]:    ${ }^{1}$ 'Strabo bears witness to the fertility of Armenia, and, which is singular, accidentally meets the objections of those, who contend that the ark did not rest in Armenia, because it is said in Scripture that Noah, from the place on which the ark rested sent forth a dove: "And the dove came to him in the eveuing, aud lo in her mouth was an olive leaf plucked off;" whereas the olive is not to be found in Armenia. But Strabo, at the end of a short passage on the fertility of a distriet
     the olive."-Geog. lib. xi. p. 528.
    ${ }^{2}$ Naklijivan. Frequent mention of this place is found among the writers of Europe.

    Ptolemy calls it Naxuana, Nagovava. Tab. As. iii. and page 135. William de Rubruquis, who travelled into Tartary, A.D. 1253, makes this mention of it: "Araxi et Naxuanre duo imminent montes Massis nomine, in quibus arca resedit."

    Galanus also, a Roman presbyter, who wrote on the reconciliation of the Armenian Church with that of Rome, tells us that, according to the natives of Armenia, the truc uame of the place is Nakhidsevan, by which they say is signified "the first place of descent."

    Taveruier

[^105]:    ${ }^{1}$ This is attested by Cirbied, Professeur Royale de la Langue Arménienne à l'Ecole Royale: " Du temps des Empereurs d'Assyrie lors des conquêtes des Macedoniens et des Romains, à l'époque des règnes des Arsacidæ en Arménie, la langue de cette contrée emprunta des mots étrangers, mais elle n'éprouva aucuu changement essentiel."

[^106]:    ${ }^{1}$ The la here is clearly the Arabic negative.
    ${ }^{2}$ The ink of this MS., unlike that commonly used in the East, a preparation of lamp-black, appears to contain some corroding substances; the letters in the middle of the page in several places having eaten through and destroyed the paper. The writing is unaffected by the application of moisture, which would efface letters written with the common Indian inks.

[^107]:    "A Agar pahalwáni na dání zabán
    "Batází tú Arwandrá Dajla lihwán."
    " Zaman gasht dast-i-fasáhat qaví
    " Bipardákhtam daftar-i-Pahlaví."

[^108]:    VOL. 1V.

[^109]:    "Resolved,-That the Committee of Agriculture and Commerce do consist of the President, Vice-Presidents, and Members of the Council, and of the following gentlemen :-the Hon. Mountstuart Elphinstone; Major-Gen. Sir Henry Worsley, K.C.B.; Sir Whitelaw Ainslie, M. D.; Colonel John Briggs ; John Crawfurd, Esq.; James Cropper, Esq.; John Fraser, Esq.; Dr. Horsfield ; M. Scott Moore, Esq., M. D. ; John Forbes Royle, Esq."

[^110]:    " We remain, Gentlemen, \&c."

[^111]:    * Colonel Briggs, the late resident at Nagpore, who has resided for many years in the valley of Berar, estimates the difference between the 2 modes of conveyance as still more considerable. He found, by enquiries made on the spot, that a common cart with two bullocks conveys seven ordinary bullock loads; and that carts on a good road proceed at the rate of 18 miles a day. Whereas laden bullocks, as I have stated, accomplish only one half of that distance. The proportion between the two, therefore, in his opinion, is as 7 to 1 , in favour of the former.

[^112]:    * In 1831, cotton was offered in the eeded districts beyond the Toombudra, at from 24 to 28 rupees per Surat candy, but in vain, how was it to reach Bombay? Could it have been screwed and carted, it would have been an excellent speculation.

[^113]:    * Colonel Sykes' mode of spelling Oriental words is adhered to in this paper.-Ed.

[^114]:    * See Proposition 7.

[^115]:    ${ }^{1}$ Printed in the present Volume,

[^116]:    Prince Esterhazy.
    Prince Lieven.
    The Marquis de Palmella.
    General Count Björnstuerna. Count Ludolf.
    Count St. Martin D’Aglie.
    Count Mannelslöh.
    Count Moltiee.
    Count Munster Meinhovel.
    Baron Bulow.
    Baron Cetto.
    The Chevalier Falck.
    The Hon. Louis Mac Lane.
    The Hon. Martin Van Buren.

    Professor Adelung, St. PetersUurgh.
    The Chevalier Adrien Balbi, Vienna.
    The Abate Bellanti, Keeper of the Royal Library at Malta.
    Professor Jacob Berggren, Stockholm.
    Professor George Henry Bernstein, Breslaw.
    The Chevalier T. X. Bianchi, Paris.
    Professor Peter von Bohlen, Königsburg.
    Professor Francis Bopp, Berlin.
    Monsieur T. R. G. Bourke, late Danish Chargé d'Affaires in London.
    Profesor Engène Burnouf, Secretary to the Société Asiatique, Paris.
    Baron Schilling de Canstadt, St. Petersburg.
    Baron Van der Capellen, late Governor General of Netherlands India.
    Professor F. B. Charmoy, St. Petersburg.
    Senhor Joaquim José da Costa de Macedo, Lisbon.
    II. J. Domis, Esq., Sourabaya, Java.

    Professor Bernhard Dorn, Kharkov.
    Monsieur D'Ohsson, Brussels.
    Monsieur l'Abbé Dubois, Missions Etrangères, Paris.
    Professor J. R. van Eerde, Groningen.
    Major C. P. I. Elout, Rhio.
    Professor Francis Erdmann, Casan.
    Professor Gotthelf Fischer de Waldheim, Moseow.
    Professor Othmar Frank, Munich.
    Professof Charles Martin Frehn, St. Petersbura.

